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COMMUNITY RESEARCH WORKING PAPER:  
SALINA, UTAH  
BLM SOCIAL EFFECTS PROJECT

by:  
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prepared by:  
Mountain West Research-North, Inc.  
in association with Western Research Corporation

prepared for:  
The Bureau of Land Management  
Contract No. AA851-CTO-46

July 1982

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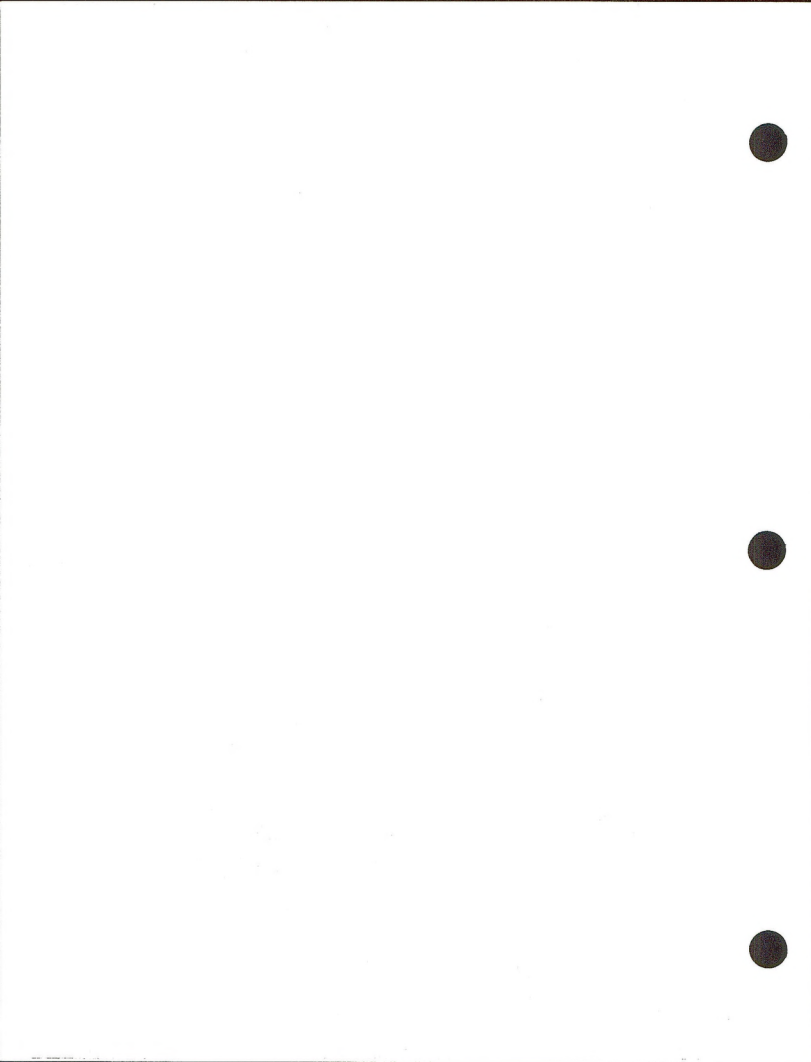
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1. INTRODUCTION

## 1. INTRODUCTION

### 1.1 Background

This report on Salina, Utah is one in a series of ten Community Research Working Papers documenting the field research conducted as part of the BLM Social Effects Project. The project was designed to improve social assessment methods by conducting the necessary literature and primary research to develop and support a Guide to Social Assessment.

The project had five major components. The first component, a review of the literature, provided the basis for developing an analytic framework for the assessment of social effects of energy development. The literature review was organized into eight major subject areas which included:

- 1) Social organization
- 2) Political organization
- 3) Economic organization
- 4) Population and demography
- 5) Family
- 6) Specific groups, including Native Americans, women, and youth
- 7) Attitudes, values, and quality of life
- 8) Mitigation

The second component, the Social Effects Conference, was held in Denver in October 1980. The conference brought representatives of state governments, BLM, and the academic community together to determine what the focus of the project would be. A principal objective was to integrate the perspectives of decision-makers and sociologists and develop a common set of assessment priorities.

The third component of the project, the research component, was based on the results of the literature analysis and the Social Effects Conference. The priorities identified for study centered on changes in community social organization and indicators of community well-being.

The fourth component of the project was the preparation of a social assessment guide and a typology of communities. The Guide is the major product of the project; to ensure its applicability, it was given a trial application under actual field conditions.

The fifth component of the project was a public involvement effort to keep interested groups informed about the project. Meetings with BLM and state officials were held to brief them on the project and to solicit comments. A period bulletin was distributed to inform others about the project. In addition, training workshops for BLM social scientists were held to instruct them in the use of the Guide.

#### 1.2 Purposes of the Research Effort

The research component was included in the project to achieve four major objectives:

- 1) To identify social effects, including those suggested by the literature review and conference, and by field investigation.
- 2) To test the analytic framework which was developed as a basis for the Guide.
- 3) To further elucidate the mechanisms that cause social effects to occur in energy impact areas.
- 4) To test field procedures and the conceptual approach at a level of effort comparable to that available to BLM staff conducting social assessments.

Although there were differences in emphasis among conference participants, seven priority assessment topics were identified as being of greatest concern. These were:

- 1) What is the distribution of socioeconomic effects among groups in impacted areas?
- 2) What determines the capacity of communities to manage growth?
- 3) What are the attitudes of residents, both old and new, toward development?
- 4) What are the effects on community facilities and services?
- 5) What are the major lifestyle and social organization changes resulting from energy development?

- 6) What are effective mitigation strategies?
- 7) How can cumulative social effects be measured or described?

Conference participants also emphasized that BLM needed an assessment method that could handle site-specific variations and that would be compatible with the multi-phase BLM assessment and planning processes.

The research phase was to last nine months and financial resources were limited. Clearly, the research effort could not do justice to all seven of the research priorities summarized above, and it was not the intention of BLM that the research effort provide definitive answers to all social impact questions. The goal was to devise an analytic framework that would produce effective social assessments given the BLM process and, at the same time, to learn as much about the above areas of concern as the limited resources permitted. Thus, the project team was given the seven research priorities and was asked to create an appropriate analytic framework and to implement the research effort.

### 1.3 The Analytic Framework

Several general criteria guided the development of the analytic framework. The first criterion was to be sure that the subject of the research was clearly social in nature. The BLM believed that enough was known about how to do economic and demographic assessments as well as facilities and services assessments, but that social assessments needed improvement.

Second, if possible, BLM wanted the assessment process to discriminate between social effects that could be mitigated and those that probably could not. Before BLM or state and local entities can require mitigation, the effects must be known and feasible mitigation methods must be understood.

Third, the framework needed to be implementable within a variety of resource constraints. Each assessment effort within BLM has different

constraints of time, personnel and funding. Thus, the framework needed to be workable under a variety of conditions.

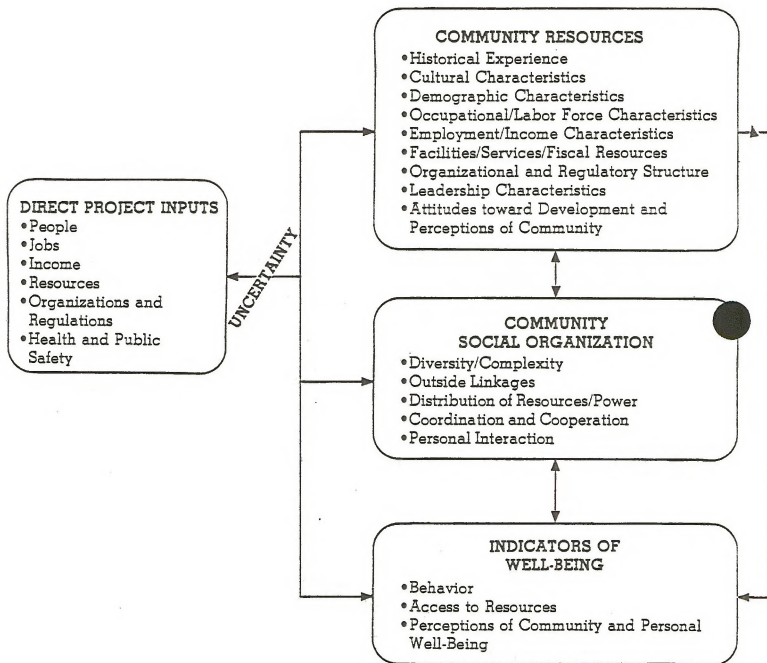
A final criterion was that the framework should not only enable the forecasts of effects, but also should allow for determining the significance of effects for various populations; that is, a basis was needed to determine the meaning of social effects.

In response to these criteria, an analytic framework was developed that is based upon the concept of social organization. As used in this project, social organization is a community level concept and is discussed in detail by Wilkinson in the Literature Review (Thompson and Branch 1981). Basically, it focuses on the social structures and processes of community social organization as the most critical social characteristics potentially affected by energy development. This framework posits that changes in the fundamental processes of social organization -- complexity/diversity, outside linkages, distribution of resources/power, coordination and cooperation, and their collective effects on personal interaction -- are among the most influential social effects of energy development. With the processes of social organization as a central focus and the desire to forecast social change caused by energy development as the principal objective, the conceptual model shown in Figure 1-1 was developed as the framework which could be used to construct the BLM social assessment guide.

The model, Figure 1-1, has four major components: direct project inputs (projects, leasing decisions, resource management plans), the community's resources, its social organization, and the well-being of individuals in the community and their perception of the community. The normative goal of social assessment is to estimate the effects of exogenous inputs on the well-being of individuals. This involves analysis of the effect of the inputs on the resources available in a community, on the social organization of the community, and finally on the well-being of individuals in the community. It thus specified the community as the proper unit of analysis for the assessment process.

FIGURE 1-1

## Social Organization Model



Based on the literature review and the BLM conference results, these four components were thought to incorporate the significant dimensions of social impact assessment. When combined with a theoretical concept of social well-being that addresses the role of the community in serving the social needs of its members, it provides a basis for examining not only the effect of the project upon social organization but also for examining the relationship between social organization and individual well-being.

A principal advantage of the model (Figure 1-1) is that it clarifies the relationship between the social assessment component and the other components of the total assessment process (e.g., economic/demographic, facilities and services, and natural environment). It also makes more explicit the mechanisms by which exogenous inputs modify community resources and social organization, and, ultimately, individual well-being -- directly by the primary effect of the inputs, and indirectly by changing interaction patterns among the components.

#### 1.4 Research Design

The research effort consisted of conducting ten comparative community case studies. These were imperative since little secondary data exist for the social variables specified in the model. Further, since the social organization variables have received little attention in western social impact research, there was little known about them. Consequently, the case study effort was divided into two phases. The first phase was exploratory in nature and included four communities. More time and effort was allocated to these communities to determine the utility of the model, and to identify major relationships and variables. In the second phase, six more communities were included, but the effort was more focused, and fewer resources were expended per community. Salina was included in the first phase effort.

As stated above, the analytic framework devised to guide the research, Figure 1-1, dictates that the "community" be included as a unit when assessing the social effects of large-scale projects. This

approach suggests that the social meaning of development for members of a social unit, the community, is determined largely by the interaction of exogenous inputs with the community's resources and its social organization.

Using this approach meant the focus of the research had to be the communities themselves. It was decided the focus had to be further restricted to rural communities, those with less than 25,000 people. This was important because many of the problems facing BLM are concerned with disruption in rural, western towns. Further, the data had to be mostly primary data collected by the research team in the field, and it was important that the results be as easily generalized as possible. Since in-depth studies of only a few cases could produce misleading results, it was important to include as many cases as possible. Eventually, ten case communities were selected.

To obtain data needed for the four components of the model, two main data sources were identified: unstructured interviews and secondary data available only at the state or local level. The secondary data collected locally were mostly for the inputs and community resource components, and for rates of behaviors. Unstructured interviewing was used for data on social organization processes and the other two major indicators of well-being -- access to resources and perceptions of the community.

Field research teams of two each were used, with ten members of the project team participating. Of these ten members, nine had considerable experience interviewing in energy-impacted towns, and rotation of team members among teams was used to minimize interviewer bias. Field instruments and procedures were developed and pretested by a three-person team before research on the ten communities was initiated.

### 1.5 Selection of Study Communities

A purposeful sampling of communities in the six-state study region based on the following criteria was decided to be the most effective sampling procedure. These criteria were the following:

- 1) The community must have had input from a major energy project between the years 1965 and 1980.
- 2) The energy development impacting the community had to be a mine, a processing plant (or both), or a gas and oil field development. Employment had to total at least 300 people, since this is approximately the minimum size of projects likely to result from the BLM leasing process. (Although a preference was shown for coal development, other energy activity qualified.)
- 3) The community had to be outside a metropolitan area.
- 4) The energy development had to be past the peak of the construction phase, and preferably, construction had been completed.
- 5) Because of the tremendous differences in legal and organizational structure between the six states, there had to be representation from each state -- preferably two communities from each state.
- 6) If possible, one of the communities in each state was to be relatively large and one relatively small (compared to the range of community sizes in the six-state area).

From the following list of all communities in the six-state region that met these criteria, the communities indicated with an asterisk were tentatively selected for primary field research (See Table 1-1).

Figures 1-2 and 1-3 are regional maps of the United States which show the six states with the twelve communities selected for study. Figure 1-2 shows the location of the study communities, while Figure 1-3 is a more detailed map and includes highways and other cities and towns. Of the twelve communities selected, ten case studies were completed. Some secondary data were collected for Center, North Dakota and Bloomfield, New Mexico but because of limitations of time and funding, interviews were not conducted for these two communities.

TABLE 1-1

## Communities Tentatively Selected for Primary Field Research

State	County	Town or Community
Colorado	Delta	Cedaredge Delta Paonia
	Garfield	Carbondale Newcastle Rifle
	Gunnison	Crested Butte Gunnison Pitkin
	Jackson	Walden
	Moffatt	*Craig
Montana	Rio Blanco	Meeker *Rangely
	Routt	Hayden
	Rosebud	*Ashland
		Birney
		Busby
		Colstrip
		Decker
		*Forsyth Lame Deer
New Mexico	Colfax	Raton
	McKinley	Gallup Thoreau
	San Juan	Aztec Blanco *Bloomfield
		Farmington
		Shiprock
	Cibola (formerly Valencia)	*Grants

TABLE 1-1 (cont.)

State	County	Town or Community
North Dakota	McLean	Garrison Underwood *Washburn
	Mercer	Beulah Hazen
	Oliver	*Center
Utah	Carbon	East Carbon Helper *Price Wellington
	Emery	Castle Dale Cleveland Emery Huntington Orangeville
Wyoming	Sevier	*Salina
	Campbell	Gillette Wright
	Carbon	Rawlins Sinclair Wolcott Junction
	Converse	*Douglas Glenrock
	Johnson	Buffalo
	Lincoln-Uinta	Evanston Kemmerer
	Platte	Glendo Guernsey *Wheatland
	Sheridan	Big Horn Dayton Ranchester Sheridan Story
	Sweetwater	Green River Rock Springs

FIGURE 1-2  
Location of Study Communities

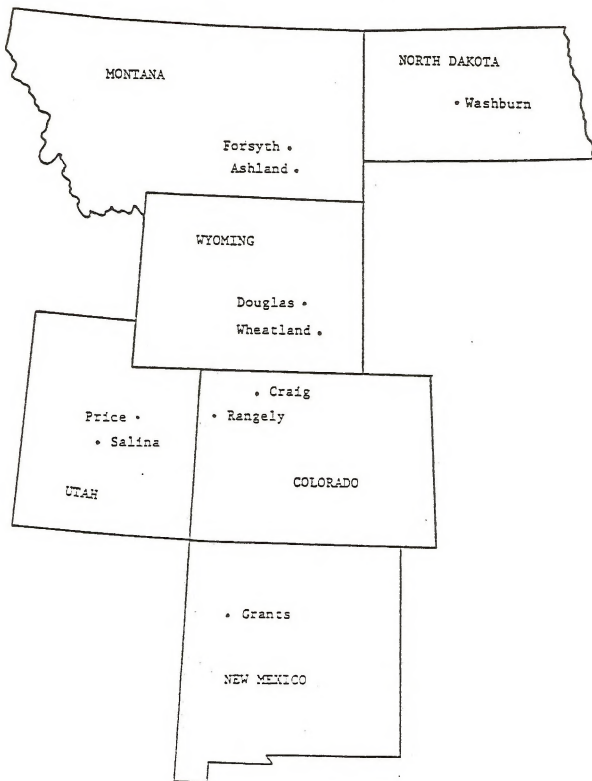
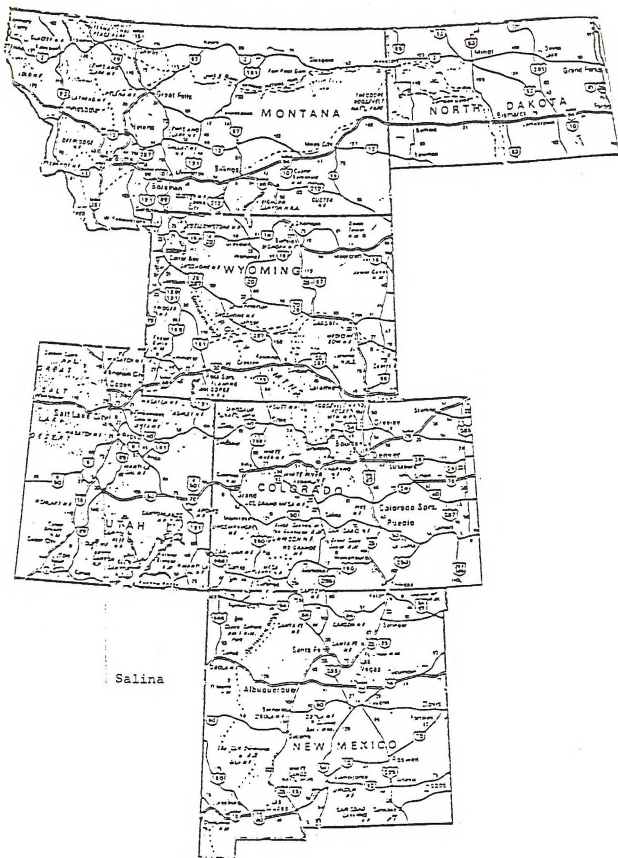


FIGURE 1-3

Map of Study Area



#### 1.6 Field Procedures and Instruments

The field instruments used were semi-structured interview protocol forms which are included in Appendix A. In addition, the field team was given an outline which specified the structure of the community reports. However, because the research was partially exploratory, the structure of the reports was deliberately left flexible to accommodate unexpected observations and findings.

The emphasis on the research was to examine the applicability and veracity of the analytic framework and to determine whether these concepts were workable and effective within the research and data constraints of the assessment process. One of the real questions to be answered by the research was whether the social organizational model was operational within Bureau assessment conditions.

Field procedures involved several general instructions. MWR and WRC prepared community information packages for each community when possible. This information was given to team members before they visited the community so they would have a knowledge base before they began to interview. Team members were encouraged to schedule the first two or three interviews before going to the community, but were urged to let their interviewee list develop as they worked in the community. For the first four communities, 10 to 16 man-days were allocated for field work; the remaining six communities were allocated 6 to 10 man-days.

The instruments were pretested in Gillette, Wyoming by three senior members of the team. Appropriate revisions were made and the instruments were then retested in Douglas, Wyoming, with another senior member of the team being substituted. This test was satisfactory, and the revised instruments were used in the ten study communities. It needs to be stressed, however, that the instruments were not highly structured. Team members, for the most part, were highly experienced in field research, and emphasis was placed on acquiring as much information as possible. This was an applied project, not a testing of a well-defined theory, and the emphasis was on increasing the information base.

Interviewers were requested to make detailed notes of interviews; the primary validity of the findings is based on concurrence of the team members. Of the ten field team participants, seven have a Ph.D. in sociology, and five had worked in this area for over eight years.

### 1.7 Limitations and Concepts

Several limitations of the research and the report need to be noted.

First, because there was a high priority on applying the analytic framework to as wide a range of communities as possible, and an interest in utilizing techniques comparable to those that would be employed in the assessment process, the level of effort for research in each community was limited. This, combined with the focus of the research on delineating trends and evaluations of changes in community resources, social organization and social well-being, meant that less effort was expended verifying specific items of information than would have been the case in a more concentrated study of a single community. As a result, readers should be aware that some of the details about the communities may be in error. For example, dates may not be precise.

Second, in order to rigorously examine the causal relationships between exogenous inputs and community response, the exogenous inputs need to be more clearly specified than this approach allowed. Ideally, an economic/demographic analysis would have been incorporated in the research. However, the specifications of the project and budget and time constraints did not allow a greater economic and demographic effort.

Third, the research reports were developed primarily as working papers to be used by the project team in developing the Summary Research Report and the Guide to Social Assessment. They have been prepared for release because it was felt that they provided valuable information on topics where research results are very scarce. Because of their genesis, the reports do not contain as extensive documentation or referencing as would have been included if they had been prepared as final, stand-alone documents, nor is the prose as polished as it might be.

Nevertheless, these limitations do not necessarily lessen the usefulness of the findings; rather, they indicate areas where caution should be exercised in interpreting and applying the results.

#### 1.8 Organization of the Report

The report for each community is organized to correspond with the social organization model, with some accommodation to the need for orientation to the community early-on. The second chapter presents a brief summary of the history of the community and its resources. The third chapter describes the resource development activities in the vicinity of the community. Chapters 4 through 7 discuss the changes that occurred in the social organization of the community as a result of the energy development in the following sequence: (1) differentiation (complexity/diversity), (2) extra-local linkages, (3) stratification, and (4) integration and personal interaction. Chapter 8 addresses the effects of the energy development on various indicators of well-being. Chapter 9 provides a brief overall summary.

2. HISTORICAL ANALYSIS OF  
THE COMMUNITY

## 2. HISTORICAL ANALYSIS OF THE COMMUNITY

### 2.1 Location and History of Settlement

The community of Salina (1980 population, 1992) is located in south-central Utah in the northern portion of Sevier County, about 125 south of Salt Lake City. It includes the town of Salina and the surrounding agricultural area. The town is located in a valley with mountain ranges to the west and east. The mountainous areas around the town are part of the Fishlake National Forest.

The city of Price (county seat of Carbon County) is about 75 miles to the northeast. Price is the largest city in southeastern Utah with a 1980 population of 9,086 persons (U.S. Census). Richfield, the county seat of Sevier County, lies approximately 25 miles southwest of Salina. In 1980, the population of Richfield was estimated to be 5,500 -- 37.3 percent of Sevier County's population of 14,729 -- while Salina accounted for 13.5 percent of the county population.

The town of Salina was established in the 1880s to serve Mormon settlers in the surrounding agricultural area. The establishment of coal operations in the 1870s strengthened the economic base of the area, but the operations were limited, serving only the local market. The growth of numerous small coal mines in southcentral Utah by 1900, concomitant with the construction of a nearby rail line, improved the stature of the town. Despite these additions, however, the town continued as an agricultural service center through the 1960s.

### 2.2 Important Historical Events

The first noticeable expansion of Salina occurred in the 1890s subsequent to the construction of the railroad in 1891. The railroad was a boon to the community's farmers and ranchers and was a factor which helped the local coal operations to continue. Expansion and completion of the rail line in the 1920s did not, however, prevent the demise of coal operations at that time.

The economic base of the town continued to be agriculture with the town providing agricultural services to the surrounding regions. It was not until the 1950s and 1960s that agriculture could not support the town's population and serious out-migration, especially of young people, ensued.

In general, however, the history of Salina was uneventful. The strong Mormon ties of the residents ensured that the community maintained close contact with the church, but few incidents of significance in preparing the community for dealing with energy development were noted in the community's history.

### 2.3 Economic Base of the Community

In the early 1900s, Salina was characterized as a small farming and ranching service town. The farming and ranching households in the surrounding area generally considered themselves part of the overall Salina community. Coal operations during this period were not stable, but laid the foundation for larger coal operations in the future. Employees in the coal mines were primarily from local families, and were closely linked with the rest of the community. As agriculture declined in the 1950s and 1960s following national trends toward consolidation and mechanization of farmland, the population in Salina dropped as out-migration increased. Out-migration was particularly high among the youthful working-age population.

As shown in Table 2-1, employment by place of residence for Sevier County showed little change during the 1960 to 1970 period. For the county as a whole, the number of employed persons increased by only 182 during this decade.<sup>1</sup> Employment in the agriculture, transportation and communications, and service sectors declined. Employment in mining remained at a low but stable level. It was estimated that mining employed about two percent of the total workers living in the county

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<sup>1</sup>It should be noted that Salina accounted for only a modest proportion of the county population. Nevertheless, local respondents indicated that these figures were indicative of trends in the Salina community.

TABLE 2-1

## Industry of Employed Persons by Place of Residence

Industry	County: Sevier				State: Utah	
	Number		Percent		Percent	
	1960	1970	1960	1970	1960	1970
Agriculture	788	648	22.1	17.3	6.0	3.8
Mining	64	82	1.7	2.1	4.4	3.0
Construction	248	333	6.9	8.8	6.9	5.5
Manufacturing	511	512	14.3	13.6	16.0	14.5
Transportation, Communications, and Public Utilities	227	179	6.3	4.7	8.0	6.7
Wholesale and Retail Trade	748	947	20.9	26.0	19.8	21.5
Finance, Insurance, and Real Estate	94	89	2.6	2.3	4.0	4.3
Services	488	412	13.7	11.0	21.8	16.4
Government	343	515	9.6	13.7	10.4	20.4
Other	-	-	-	-	-	-
Not Reported	51	-	1.4	-	2.7	-
TOTAL EMPLOYMENT	3,562	3,744	100.0	100.0	302,147	378,562

Sources: USDC, BOC, 1970 Census of Population-Utah, General Social & Economic Characteristics Tables 123, 66; USDC, BOC, 1960 Census of Population-Utah GSEC Tables 70, 85.

in 1970. The wholesale and retail trade sector was the largest employer in Sevier County during this period, accounting for over 25 percent of the total number of jobs. Agriculture was second (17.3 percent) and manufacturing and government were tied for third (13.6 and 13.7 percent, respectively). In 1967, approximately 16 percent of the jobs located in the county were farm proprietors and another 10 percent were non-farm proprietors (630 and 387 jobs, respectively).

As shown in Table 2-2, in both 1960 and 1970, Sevier County had a lower percentage of employed persons in professional, clerical, and crafts professions than the state as a whole, while a higher percentage were operatives (including transport equipment operatives) and farmers than in the state as a whole. These data reinforce the characterization of the county as largely rural, with little economic activity aside from agriculture, agricultural support, and a little mining.

#### 2.4 Earlier Mineral and Energy Development

Coal mining operations were initiated in the Salina area in the late 1880s. Throughout the subsequent period, the mines continued in operation, though with significant fluctuations in work force size. Prior to the 1970s, mining was not considered particularly important to either the county or town economy and did not serve as a major source of employment or income for county or town residents.

Workers for the underground mines traditionally came from the local labor force. Since the operations near Salina were small in scale, the companies who owned and operated the mines were never large enough to exert much control over either the local labor force or the housing and retail sectors of the Salina economy -- unlike the situation in a number of other Utah communities where coal mining was characterized by large-scale operations and high levels of employment (Price is a good example). Historically, therefore, Salina and the surrounding area of Sevier County did not fall into the category of company towns. "Coal camps," frequent in other areas in Utah, were not established in Sevier

TABLE 2-2

## Occupation of Employed Persons by Place of Residence

Industry	County: Sevier				State: Utah		United States	
	Number		Percent		Percent		Percent	
	1960	1970	1960	1970	1960	1970	1960	1970
Professional	298	465	8.4	12.4	13.0	17.2	10.3	14.85
Managers, Administration (except farm)	400	419	11.2	11.2	9.5	9.2	10.7	8.32
Sales	265	275	7.4	7.3	7.0	7.0	6.9	7.11
Clerical	323	467	9.1	12.5	15.6	18.5	6.9	12.96
Craftsmen, Foremen	363	404	10.2	10.8	15.6	14.5	19.5	13.86
Operatives (except transport)	533	373	15.0	10.0	14.9	9.8	19.9	13.71
Transport Equipment Operatives	-	319	-	8.5	-	3.7	-	3.86
Laborers (except farm)	230	176	6.5	4.7	4.8	4.3	6.9	4.48
Farmers and Farm Managers	727	527	20.4	14.1	5.4	3.1	5.5	1.85
Service (except private household)	320	390	9.0	10.4	9.0	12.0	6.0	11.27
Private Household	45	29	1.3	0.8	1.4	0.7	0.1	1.50
TOTAL	3,562 3,744				3.8 378,562			

Sources: U.S. Department of Commerce, Bureau of the Census of the Population, General Social and Economic Characteristics-Utah, Tables 54,118,121, 122 - 1971 Washington, D.C.; U.S. Department of Commerce, Bureau of the Census, 1960 Census of the Population, Characteristics of the Population, Vol. I, Part 46-Utah, Tables 70, 81, 84, 1961 Washington, D.C.; USDC, BOC, COP, 1960, U.S. Summary, Table 89.

County, though because of their prevalence in Carbon and Emery counties, residents were generally aware that such camp towns did exist.

Because Salina's needs for coal miners had been met from the local labor pool, and little other economic growth had occurred, Salina and its residents had historically not been challenged by the need to absorb newcomers or to deal with a large, powerful employer.

In 1965, the Southern Utah Fuel Company (SUFCO) purchased a coal mining operation in the eastern portion of Sevier County from a local family. Although the mine remained active through the end of the decade, it was limited in terms of employment, and the transfer of ownership did not provide sufficient impetus to reverse the town's trend of out-migration. In 1970, wage and salary employment in the mining sector was insignificant, estimated at less than 40 people.

#### 2.5 Distinctive Ethnic and Cultural Groups

Salina has always been dominated by one major social group -- the Mormons. Historically, well over 90 percent of the community's population have been members of the Mormon church. The influence of the Mormon church in the area has been pervasive, fostering close familial and community ties. The close knit character of the community was noteworthy, and was attributed by area residents to (1) the participation and membership of a high proportion of the population in the Mormon church, which itself promoted community solidarity and cohesiveness; (2) longtime family residence in the community (the residential stability was reported to historically have been very high); (3) the role of the church in community and social activities; (4) intra-community marriage; and (5) a strong sense of community. Throughout its history, because of the lack of economic activity that required residential mobility, Salina established a high level of cultural and social homogeneity.

Although the increased coal mining activity in the area resulted in substantial population growth and some in-migration of non-Mormon residents, the evidence indicates that most of the employees at the mine and

development-related jobs were either already residents of Salina (who therefore did not out-migrate) or persons who had previously out-migrated but took the opportunity provided by the increased employment to return.

At the time of the study in the fall of 1981, community residents estimated that approximately 80-90 percent of the Salina population were members of the Mormon church. Coal mining and its associated population growth were generally seen to have reinforced existing family, community and cultural linkages to Salina by increasing the ability of residents to remain or return to the community and by improving the economic status of the community as a whole.

## 2.6 Historical Relationship with other Communities

Throughout its history, Salina's function as a small agricultural service area providing support to the surrounding farms and ranches remained largely unchanged. The population in the area was residentially stable and culturally homogeneous. Salina was affected by its position in an urban regional system in which the prime communities -- Price and Richfield (the Sevier County seat) -- were relatively close, and expanding. The communities of Price and Richfield were historically important to the development and stability of Salina. Because Carbon County, Emery County and Sevier County were the major coal mining areas in Utah, Carbon and Emery activities served as a source of employment for Salina residents who moved to those areas when they were unable to find adequate employment in the immediate area of Salina. The history of residential stability and the establishment and maintenance of ties among families in the area communities resulted in a dense network of friendship and kin relationships. These ties, and the commutation of persons from Salina to work in Carbon County and Price as coal development activities increased and the economy expanded, heightened the importance of the coal mining operations and resource exploitation to Salina residents. The growth of Price and Richfield as employment centers enabled some longtime Salina families to remain in the community while commuting to work. Consequently, although Salina remained

isolated from direct contact with large-scale energy development prior to the 1970s and retained its small town character, its contact with coal development and exposure to the major changes that were occurring in other communities in the region meant that Salina residents were not entirely naive about the potential consequences of energy-related development.

## 2.7 Energy Development in the Region and its Effect on Salina

Price (located 75 miles northeast of Salina) and Carbon County have historically constituted the principal coal mining center of the state of Utah. As such, Carbon county's economy has been closely tied to this one industry, and spillover effects have reached to the surrounding counties, including Sevier (Burnett 1980). The economic and demographic history of Carbon County and Price correlate closely with the history of coal production. Because of this, changes in the community of Price and the effects on other nearby areas can be linked to national and even international sociopolitical forces. The economic and demographic pattern in Carbon County has been one of peaks and valleys, boom-to-bust, with relatively few periods without fluctuations. Between 1960 and 1970, the population of Carbon County declined from 21,135 to 15,647. By 1980, it had increased again to 22,179. These fluctuations affected Salina, since it is one of the communities within the service area of Price. Direct employment of Salina residents in Price existed but was limited.

## 2.8 Description of the Energy Development Activities Affecting Salina

### 2.8.1 Type of Energy Development Activities

The general location of the coal resources in Sevier and neighboring counties (Carbon and Emery) is shown in Figure 1-3. As seen in this figure, none of the coal resources are in the immediate vicinity of any population centers. The major highway connections from the coal fields in Sevier County and along the Sevier-Emery County border are to Salina,

Castle Dale and Price (which is also affected by coal development activities in northwestern Emery county as well as throughout Carbon county). Coal mining has been the principal energy development activity affecting Salina, although oil and gas exploration increased during the latter part of the 1970s. No coal conversion facilities had been located in the county by 1981, although the Hunter Power Plant (two completed and two planned units) and the Huntington Power Plant located in the northwestern portion of Emery County were constructed during the 1970s. (Utah Department of Energy 1981:104) However, because of poor road conditions during the winter months, relatively few Salina residents worked at the mines or plants located in Emery County, and few employees from these activities located in Salina.

The energy development project considered most important by Salina residents was the expansion of the Southern Utah Fuel Company (Sufco) mine (a subsidiary of the Coastal States Energy Company) which started in 1973.

## 2.8.2 Description of the Projects

### 2.8.2.1 Projects Underway

Southern Utah Fuel Company--Sufco Mine. The Sufco underground mine is about 30 miles east of Salina in the Wasatch Plateau coal field. The mine is located on 5071.8 acres of land leased from the federal government. Southern Utah Fuel Company, which purchased the mine from a local family in 1965, became a subsidiary of Coastal States Energy Company in 1973. At the time of the study the mine operation was a joint venture with Getty Resources. Coal from the mine was trucked about 75 miles from the mine site to a railroad loading area near Levan. It was then shipped out of the area by rail, primarily to the Sierra Pacific Power Company. Although Coastal States Energy company has its headquarters in Houston, Texas, the company established an office and staging site in Salina. They maintained a high local presence. The work force at the mine increased from approximately 40 workers in 1972 to about 230 in 1980. In 1980, mine production was 1.8 million mine tons per year

(MMTPY). Production was forecast to increase to 2.2 MMTPY by 1982, although expansion plans were dependent upon continued demand for coal.

Coal Search Corporation -- Knight Mine. The underground Knight mine was purchased by the Coal Search Corporation from the Energy Reserves Group and reactivated in 1979. The employment at the mine was 38 in 1979, and 47 in 1980. At full production, the mine was expected to produce 0.5 MMTPY, and employ about 200 persons. In 1980, its production was 0.1 MMTPY. The mine is located 10 miles west-northwest of Fremont Junction and about 25 miles east of Salina. The Coal Search Company maintained an office in Salina and was considered a minor employer at the time of the study.

Consolidation Coal Co. -- Emery Deep Mine. The Emery Deep mine, owned by the Consolidation Coal Company and Kemmerer Coal Company, is an underground mine located on 18,745.9 acres of federally leased land. The mine is in the Emery coal field and is about 35 miles east-southeast of Salina. In 1980, mine employment for the 0.7 MMTPY production was about 200. The mine was anticipated to expand to produce 1.0 MMTPY by 1984, market conditions permitting. The coal from the mine was primarily shipped to the midwest for use by utilities. Corporate offices were maintained in Englewood, Colorado.

Utah Power and Light Company -- Hunter Power Plant. The two unit Hunter Power Project is located in Emery county three miles south of Castle Dale. The plant is supplied with about 2.1 MMTPY of coal from the Wilburg and Deseret Mines (owned by Utah Power and Light). Construction on the plant started the early 1970s. Unit 1 became operational in 1978. Unit 2 went into operation in 1980. In 1980, the operations work force at the two unit 800Mw facility was 238. At the time of the study in 1981, there were plans to add two additional 400 Mw units to the complex. The construction work force was forecast to peak at 1,255 workers in 1982. The operations work force was forecast to reach 588 persons by 1985. Since few workers from the Hunter project located in Salina, the project had very little impact on Salina.

Utah Power and Light Company -- Huntington Canyon Power Plant. The dual 400 Mw unit Huntington plant was initiated in the late 1960s. It is located nine miles west of Huntington in Emery County. Coal is obtained for the mine from the Deer Creek and Deseret mines (Utah Power and Light owned). Unit 1 became operational in 1974. Unit 2 was completed in 1977. In 1980, the operations work force at the plant totaled 220. Since few workers at this project were or became residents of Salina it also had minimal impact on Salina.

#### 2.8.2.2 Proposed Projects

Ute Energy Company -- Ute Mines #1 and #2. This combined surface and underground mining activity was proposed for construction in 1983. At full operation, the two mines were expected to employ about 400 workers. Combined production was expected to reach about 3 MMTpy in 1988. The mine site is located south of I-70 about 35 miles south of Price and approximately 35 miles from Salina. The original mine plan submitted for this mine (1980-1981) was ruled deficient, and a revised plan was under consideration by the company at the time of the study in fall, 1981.

#### 2.8.3 Mitigative Actions

The impact of increased regional energy development activity upon Salina was affected by the location of the mines and power plants. Because the coal resources were located at some distance from Salina (and other population concentrations), workers were drawn from a number of communities, and newcomers were faced with residential choices. Workers were less likely to come from or relocate to Salina than if the development had been closer or the residential choices more limited. Although the region is sparsely populated, the location of the large majority of the mining and power plant activity in Sevier and Emery counties approximately equidistant from Salina, Price, and Green River substantially reduced the direct impacts experienced in Sevier County and in Salina in particular. It is thought that the effect of distance was further enhanced by the relative size and character of the towns, and by winter

road conditions. Price, being larger, more cosmopolitan and having more amenities, attracted a larger proportion of the in-migrating population.

The number of in-migrants to Salina during the 1970s was limited by three factors. First, there was a long history of energy development activity in the region. This had resulted in a rather extensive labor pool available to work in the mines and generating facilities. Second, there was a moderate schedule of work force build-up that occurred at the energy facilities in the area affecting Salina. To some extent this was due to an official policy by the owners of the facilities that work force expansion would be gradual, but it also resulted from the nature of the energy development itself. Underground mining operations do not require a large number of construction workers (40-100 was common), and under normal schedules there are, therefore, no major peaks and valleys in the size of the work force as the mining activity moves from construction to operation. The pattern is generally one of fairly steady growth. (This is not true for the power plants which have large peak construction work forces 4 to 6 times the size of the operating work force. Salina did not appear to receive much of the impact from the construction of the two power plants in Emery County).

Finally, the mining operations most affecting Salina, and the Sufco mine in particular, followed a hire-local policy that corresponded with the need of local residents for off-farm employment and further reduced the disruptive effects of substantial population in-migration. Interviews with company officials of Southern Utah Fuel Co. and key community residents indicated that approximately 80 percent of the mine's employees were local residents. In addition, many of the non-local employees were former residents or children of residents. The miners, therefore, were largely already incorporated into the town's kinship, social, and church supported activities and networks.

Local residents generally felt that the increased employment opportunities for community farm families were beneficial. Many of the farming operations in the area were marginal. Consequently, when jobs

became available for members of these households, they were taken to provide additional income and employment which was used to enable the family to stay in the area and maintain the farming operation. The hiring of locals dissipated any potential social disruption that might have resulted from in-migration of a large number of "outsiders." In-migration of Salina people had a positive effect on the families of the area and was generally considered a major positive aspect of the growth. In addition to providing employment for under-employed adults, the energy activities also provided high paying jobs for the community's youth. The availability of such jobs was credited by many with reducing the traditional out-migration of high school graduates, though no statistics were available to document these impressions.

Because of the particular character of the local area and the hiring policies of the mine operators, the insider-outsider split characteristically found in rapid growth communities was minimized. The hiring of locals was thought to be an important factor limiting the amount of turnover among mine employees. This was considered a benefit both for the companies and for the town, which therefore had to deal with fewer new faces than would ordinarily have been the case.

Overall, the energy activities that occurred in the 1970s were viewed as increasing the employment opportunities for local residents, reinforcing traditional values, strengthening family ties, and enhancing the local economy.

No specific provision for housing or other facilities in Salina by the energy companies was noted, though generally residents felt that none was warranted, given the relatively low level of impact and the benefits received.

3. CHANGES IN COMMUNITY RESOURCES  
DURING THE STUDY PERIOD

### 3. CHANGES IN COMMUNITY RESOURCES DURING THE STUDY PERIOD

#### 3.1 Definition of the Impact Period

As discussed in Chapter 2, Salina experienced stable growth in the early 1900s and declining population from 1950 to 1970. During the 1960 to 1970 period, the population in Salina decreased from 1,618 to 1,494 people. This decline reflected the lack of employment opportunities in the area and the out-migration of the working-aged population, especially the youth. Declining employment in the agricultural sector due to farm mechanization and consolidation further contributed to the population decline. The population trends in Salina were not dissimilar to those found in Sevier County as a whole, as shown in Table 3-1 and Figure 3-1.

According to the population statistics, the impact period commenced in the early 1970s. The population estimates indicate that in 1971, the population had jumped dramatically, rising abruptly to its 1960 level. However, interviews with key informants suggested that the growth in population was not realized until 1973-1974, after the expansion in the mining sector. The level of population remained fairly stable during the 1971-1973 period and subsequently grew at a consistent rate through the remainder of the decade. By the mid-1970s, fairly strong housing construction activity was underway in Salina and in the unincorporated area immediately surrounding the town as a response to the population growth. At this same time, overcrowding in the schools began to appear. However, most key informants described the growth as steady and controlled rather than rapid. There was no sense among community residents interviewed for the study that Salina had been a "boomtown" and the evidence suggests that the city was able to deal with the changes due to growth. The growth was not considered disruptive. While the impact period can be defined as the period from 1971 to 1980, most of the mining-induced growth was realized between 1975 and 1980.

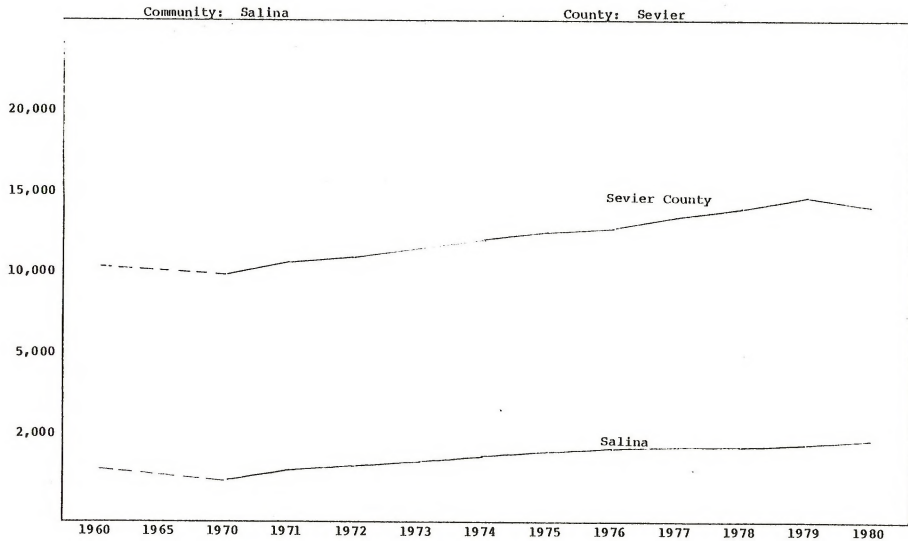
TABLE 3-1

Community Population  
Sevier County  
1970, 1980

Community	Population		Change	Percentage of Total Change Accounted for by Each Community
	1970	1980	1970-1980	
Monroe Division	1,784	3,050	1,266	27.4
Richfield Division	5,874	8,062	2,189	47.3
Richfield City	4,471	5,482	1,011	
Salina Division	2,446	3,615	1,169	25.3
Salina City	1,494	1,992	498	
Sevier County Population	10,103	14,727	4,624	100.0

Sources: U.S. Department Commerce, Bureau of the Census, 1970 Census of Population Number of Inhabitants, Utah, Table 10; U.S. Department Commerce, Bureau of the Census, 1980 Advanced Reports, Census of Population and Housing-Utah, Table 1.

FIGURE 3-1  
Population Trends



### 3.2 Employment, Income, and Population

#### 3.2.1 Employment

Employment statistics by place of work during the 1970 to 1979 period show major changes in the economic structure of Sevier County, the smallest unit for which data are available. As seen in Table 3-2, total employment in Sevier County increased from 4,220 in 1970 to 6,025 in 1979, an increase of about 50 percent. During this period, the number of farm proprietors continued to decline (from 630 to 448 persons or from about 16 percent to 7.7 percent), as did farm wage and salary employment. Non-farm proprietors increased in absolute numbers (387 to 652) while maintaining a constant proportion of the total employment. Three sectors of the total economy showed substantial gains in employment -- mining, construction, and TCPU (transportation, communications and public utilities). The number of persons employed by coal mining operations increased from 40 in 1970 to 144 in 1975. By 1977 the number had risen to 292. At its peak in 1977, mining employment contributed slightly more than 5 percent of total wage and salary employment in Sevier County. Its importance was reported to have been greater in Salina than in the county as a whole.

Accompanying the increase in mining employment, additional jobs were created in the construction sector, which increased from 71 persons in 1970 to 465 persons in 1979 (rising from 1.7 to 7.7 percent of total employment). As in-migration increased and out-migration was reduced, and as more money was available in the local economy, the retail and government sectors of Sevier County and Salina expanded.

#### 3.2.2 Income

As a result of this increased employment, Salina experienced an increase in per capita income as well, although less than that experienced in many other energy development communities due to the limited proportion of energy employment in the county. As shown in Table 3-3, per capita income in Sevier County was \$2,714 in 1970 -- 85.6 percent of the average per capita income in Utah at this time (\$3,169) and 69.7 percent of the national average of \$3,893. In 1979, per capita income in

TABLE 3-2

## Employment by Industry by Place of Work

Industrial Sector	County: Sevier											
	Number						Percent					
	1967	1970	1972	1975	1977	1979	1967	1970	1972	1975	1977	1979
Total Employment	4,007	4,220	4,348	4,924	5,527	6,025						
Proprietors: Farm	630	564	515	467	468	448	15.72	13.36	11.84	9.48	8.47	7.43
Non-farm	387	461	457	522	594	652	9.65	10.92	10.51	10.60	10.75	10.82
Wage & Salary Employment	2,990	3,177	3,376	3,935	4,465	4,925	74.61	75.28	77.64	79.91	80.79	81.74
Farm	261	223	167	178	170	144	6.51	5.28	3.84	3.61	3.08	2.39
Agriculture Services	16	31	20	3	4	6	0.39	0.73	0.46	.01	.01	.01
Mining	38	36	53	144	292	272	0.94	0.85	1.21	2.92	5.28	4.51
Construction	83	71	123	265	353	465	2.07	1.68	2.82	5.38	6.39	7.71
Manufacturing	503	507	456	476	463	539	12.55	12.01	10.48	9.67	8.38	8.94
TCPU	124	134	152	197	246	257	3.09	3.17	3.49	4.00	4.45	4.26
Wholesale Trade	102	120	127	195	178	170	2.54	2.84	2.92	3.96	3.22	2.82
Retail Trade	571	691	805	881	1,009	984	14.25	16.37	18.51	17.89	18.26	16.33
FIRE	69	69	83	118	138	154	1.72	1.63	1.90	2.40	2.50	2.55
Services	332	359	416	454	533	646	8.28	8.50	9.56	9.22	9.64	10.72
Government	891	936	974	1,024 <sup>a</sup>	1,079 <sup>b</sup>	1,288	22.23	22.18	22.40	20.8	19.52	21.37

Sources: U.S. Department of Commerce, Regional Economic Information System, Bureau of Economic Analysis, April,

1981.

<sup>a</sup> Includes state and local 731, Federal civilian 157, Federal military 96.<sup>b</sup> Includes state and local 723, Federal civilian 274, Federal military 82.

TCPU = Transportation, Communications and Public Utilities

FIRE = Finance, Insurance &amp; Real Estate

TABLE 3-3

## Labor Force Characteristics, Unemployment, Per Capita Income, and Poverty

Year	County: Sevier				State: Utah			United States		
	Labor Force	Unemployment Number	Unemployment Percent	Per Capita Income	Unemployment Rate	Per Capita Income	Poverty (percent)	Unemployment Rate	Per Capita Income	Poverty (percent)
1960	4,620	210	4.5	\$1,487		\$1,926	14.7		\$2,201	17.8
1965	4,220	200	4.7	1,983		2,366		4.5	2,750	17.3
1970	4,410	300	6.8	2,714	6.1	3,169	7.9	4.9	3,893	12.6
1971	4,640	280	6.0	2,944	6.6	3,427		5.9	4,132	12.5
1972	4,690	300	6.4	3,381	6.2	3,719		5.6	4,493	11.9
1973	4,930	300	6.1	3,856	5.8	4,082		4.9	4,981	11.1
1974	5,450	330	6.1	3,988	6.1	4,465		5.6	5,428	11.2
1975	5,933	389	6.6	4,344	7.2	4,903		8.5	5,861	12.3
1976	6,150	350	5.7	4,811	6.1	5,379		7.7	6,401	11.8
1977	6,360	360	5.7	5,186	5.7	5,946		7.0	7,038	11.6
1978	6,730	270	4.0	5,761	4.6	6,581		6.0	7,840	11.4
1979	6,970	260	3.7	6,080	4.5	7,182		5.8	8,706	
1980				7,000	5.4	7,400				

Sources: Utah Department of Economic Security, Labor Market Information System, 1979-80, June 81; BEA April 1980 provisional, Utah Per Capita Personal Income Revised 1959-78 with 1979; USDC, BOC, Current Population Report, Characteristics of the Population below poverty level, 1978, Table 1.

Sevier County had increased to \$6,080, falling to 84.6 percent of the Utah state average while maintaining its relationship with the national figures (69.8 percent).

As seen in Table 3-3, the number of unemployed workers in Sevier County remained relatively constant during the study period. There were an estimated 300 persons unemployed in 1970, 6.8 percent of the county work force. The total number of unemployed rose to a peak of 589 (6.6 percent) in 1975, a year of nationwide recession. By 1979, the total number of unemployed had declined to 260 and the unemployment rate had dropped to 3.7 percent, substantially below the national average.

The data for Sevier County do not show a dramatic reduction in unemployment rates during the growth period, unlike many of the more heavily impacted areas in the West. Although the total number of unemployed did not increase greatly, the unemployment rates remained relatively close to national levels throughout the study period. These data somewhat contradict the perceptions of local residents who generally felt that the increase in employment opportunities provided jobs for those seeking them, and that the unemployment and underemployment characteristic of the area had been reduced.

Table 3-4 shows the average per worker wage rates for each industrial sector in Sevier County and the state of Utah for the 1967-1979 period. As seen in this table, wages in government and services sector jobs increased fastest in Sevier County, while mining, TCPU, and manufacturing showed the greatest increases statewide. Overall, per worker wages in Sevier County increased 163.4 percent between 1967 and 1979, compared to 134.8 percent statewide.

Salina residents generally reported little commercial response to the improved economic status and increased population of the community. There was no influx of chain stores or establishment of department stores, for example. Although marginal firms were felt to have obtained a new lease of life, and a few restaurants and hotels relocated to Salina, little overall change in the character of downtown businesses

TABLE 3-4

## Per Worker Wage Rate by Industrial Sector

Industry	County: Sevier						Percent Increase 1967-1979	State: Utah						Percent Increase 1967-1979
	1967	1970	1972	1975	1977	1979		1967	1970	1972	1975	1977	1979	
Agriculture	\$5,114	\$7,921	\$11,752	\$5,083	\$5,504	\$11,921	116.2	\$4,621	\$6,077	\$8,122	\$6,006	\$5,813	\$8,283	79.2
Mining	6,500	8,805	10,547	19,062	20,428	26,643	309.9	8,442	10,120	11,641	16,626	20,487	25,003	196.2
Construction	10,493	14,000	13,983	14,101	17,237	18,735	78.5	9,240	10,903	12,150	14,821	17,089	19,408	110.0
Manufacturing	5,157	5,802	7,186	8,535	10,691	12,525	142.8	7,156	8,250	9,136	11,632	13,707	16,198	126.4
TRU	7,790	10,194	12,881	13,847	16,979	17,933	130.2	7,941	9,779	11,605	14,682	17,835	21,360	169.0
Trade	5,885	5,644	6,246	7,411	7,898	10,194	73.2	5,282	5,920	6,512	9,098	9,009	10,898	106.3
FIRE	6,797	8,275	8,903	8,271	10,992	13,746	102.2	7,165	7,830	9,421	11,615	12,775	14,977	109.0
Services	4,816	5,245	6,858	8,592	11,106	12,640	162.5	5,849	6,782	7,354	10,149	10,866	12,994	122.2
Government	4,079	5,123	6,148	7,630	9,633	10,745	163.4	5,263	6,510	7,384	9,956	10,599	12,102	129.9
Other	8,242	7,479	10,949	11,454	13,392	15,351	86.3	8,633	8,446	9,976	9,937	12,700	14,974	73.5
TOTAL	4,242	4,999	6,289	7,354	9,146	11,175	163.4	5,533	6,589	7,470	9,191	10,891	12,994	134.8

Source: Mountain West Research - North, Inc.

was noted. As a result, local entrepreneurs reported more activity without a great increase in competition from outsiders. This consequence reinforced the positive attitude of the business community toward the growth that resulted from energy development.

However, not all energy development was viewed with equal favor. Residents of the community perceived different effects from different development activities. While coal mining operations were considered to be largely beneficial to the town, oil and gas exploration and the influx of oil and gas workers was considered to have some notable adverse effects. Coal mining was perceived to be a stable, gradual growth activity that enhanced the town through in-migration of families who were easily integrated into community life. In contrast, oil drilling operations were seen as resulting in the in-migration of a large number of short-term, transient "outsiders" who were less interested in establishing close ties in the community and who were more difficult to accommodate.<sup>1</sup> This feeling was consistent with that expressed in other communities which had experience with both miners and oil exploration workers.

### 3.2.3 Population

Table 3-5 shows the pattern of population growth in Salina and Sevier County between 1970 and 1980 as well as the population change that occurred in neighboring Carbon and Emery counties. As seen in this table, the net increase in population in the town of Salina was about 500 people, while Sevier County increased by over 4,600. This represented an increase of 33.3 percent in Salina and 45.8 percent for the county as a whole. The unincorporated portion of Salina increased by 671 persons or 70.5 percent. Much of this growth was on the outskirts of the town, effectively contributing to the population of Salina as a community. As a result, population growth in the community was probably closer to 800 or 900 people (60 percent). In comparison, the population

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<sup>1</sup>Local residents tended to attribute the perceived increase in crime and other socially problematic behavior to the oil and gas workers.

TABLE 3-5

Population Change in Salina, Sevier County,  
Carbon County, Emery County and Utah  
1970-1980

Year	Salina	Sevier County	Carbon County	Emery County	Utah State
1970	1,494	10,103	15,647	5,137	1,059,273
1971	1,614	10,500	16,100	5,300	1,095,000
1972	1,648	10,900	16,500	5,200	1,128,000
1973	1,686	11,800	17,308	6,100	1,150,000
1974	1,711	12,400	17,600	6,200	1,179,000
1975	1,769	12,800	18,200	6,700	1,203,000
1976	1,821	13,100	19,300	8,300	1,232,000
1977	1,858	13,700	20,400	9,300	1,270,000
1978	1,921	14,400	21,500	10,100	1,317,000
1979	1,965	15,000	21,600	10,800	1,367,000
1980	1,992	14,727	22,179	11,471	1,461,037

Sources: U.S. Dept. of Commerce, Bureau of the Census, Population Estimates, Series p-25; Keith Burnett, Program Manager for Community Development, Southeastern Utah Association of Governments, 24 July 81, personal communication; 1970 U.S. Census population figures; John Brockert, Director, Bureau of Health Services, personal communication, Salt Lake City, Utah, 7 May 1981, mid-year estimates.

of Carbon County increased by 6,532 persons (41.7 percent) and the population of Emery County increased by 6,334 persons (123.3 percent).<sup>1</sup>

Table 3-6 shows the components of population growth in Sevier County between 1970 and 1980. According to these data, the greatest influx of population occurred in 1973, when net migration was 766 persons and total population growth was 900.

Both prior to and during the growth period, Salina had a large population of elderly. According to the census data shown in Table 3-7, 12.7 percent of the population of Sevier County was age 65 or over in 1970 compared to 8 percent in the state and 9.9 percent in the nation. As employment opportunities expanded, the retention of working age adults, many in their earlier years, and the in-migration of other working age heads of household with their families had a noticeable effect on the age distribution in the community, although not entirely in the manner anticipated. Between 1970 and 1980 the percentage of the population in the 65 and over age-group increased to 13.2 percent despite the increase in the 16-44 age group from 34.5 percent to 38.4 percent. This created an age-stratified population with high proportions of both elderly and young adults.

Although this structure did not lead to major behavioral problems or community issues, a number of community residents suggested that since drug abuse and nonconforming public behavior were more prevalent among members of the youthful population than the population as a whole, their increased presence in the community had raised the incidence of such problems. According to some of the elderly residents who were interviewed, the generational difference resulted in lifestyle differences between the young and the elderly, despite the overall similarity of their backgrounds. Community residents tended to perceive these tensions as a clash of values. This clash was most commonly reported in

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<sup>1</sup>This appears to have been due to the construction of the two power plants in Emery County.

TABLE 3-6

Components of Population Change  
Sevier County  
1970-1980

Year	Change			Components of Change			
	Population	Number	Percent	Births	Deaths	Net Migration	Net Migration Percent
1970	10,103			201	98		
1971	10,500	397	3.9	202	93	288	2.9
1972	10,900	400	3.8	221	109	288	2.7
1973	11,800	900	8.3	257	123	766	7.0
1974	12,400	600	5.1	257	102	445	3.8
1975	12,800	400	3.2	294	112	218	1.8
1976	13,100	300	2.3	356	110	54	0.4
1977	13,700	600	4.6	359	113	354	2.7
1978	14,400	700	5.1	424	106	382	2.8
1979	15,000	600	4.2	424	115	291	2.0
1980	14,727	-273	-1.9	424	113	-584	-3.9

Source: Mr. John Brockert, Director, Bureau of Health Services, State of Utah, Salt Lake City, personal communication, 12 May 1981.

TABLE 3-7

## 1970 and 1980 Age and Sex Distribution

	County - Sevier 1970					County: Sevier 1980					State: Utah 1980	United States 1980		
	Number		Percent <sup>a</sup>		Total	Number		Percent <sup>a</sup>		Total	Percent <sup>a</sup>	Percent <sup>a</sup>		
	Male	Female	Male	Female		Male	Female	Male	Female		Total	Male	Female	Total
TOTAL	4,936	5,167	49	51	10,103	7,284	7,444	49.5	50.5	14,727	100.0	48.6	51.4	100.0
0-5	434	429	4.3	4.2	8.5	840	825	5.7	5.6	11.3	13.0	3.7	3.5	7.2
6-15	1,123	1,095	11.1	10.8	21.9	1,345	1,269	9.1	8.6	17.7	18.6	7.9	7.5	15.4
16-24	735	772	7.3	7.6	14.9	1,277	1,248	8.7	8.5	17.2	20.2	9.5	9.3	18.8
25-44	940	1,044	9.3	10.3	19.6	1,518	1,610	10.3	10.9	21.2	26.3	13.7	14.0	27.7
45-64	1,090	1,158	10.8	11.5	22.3	1,404	1,448	9.5	9.8	19.3	14.5	9.3	10.3	19.6
65+	614	669	6.1	6.6	12.7	904	1,051	6.1	7.1	13.2	7.5	4.5	6.7	11.2
1970 Median Age											23.1			
1980 Median Age											24.2	28.8	31.3	30.0

Sources: Utah Job Service, Ken Jensen, labor economist, Salt Lake City, Utah, personal communication, 4 Nov. 1981; USDC, BOC, 1980 Census of Population - Supplementary Report, May 1981.

<sup>a</sup> Percent of total population.

regard to personal behavior and the type of fiscal policy that was supported. According to key informants, a large proportion of Salina's residents and a very high proportion of the elderly were on fixed incomes. Consequently, they did not favor expansion of public services and were concerned that response to growth would have an adverse effect on property tax rates (which it did). The younger, employed population often supported improvements in the area's infrastructure and public services even if this required tax increases.

However, because the growth in population was both gradual and moderate, the demand placed on community services were also generally moderate. Residents reported that some of the conflict between the two groups resulted not from growth-related demands, but from underlying differences in attitude about the role and responsibility of local government.

In general, few major issues surfaced in Salina during the study period, although several growth-related concerns did emerge. Overall, residents of the community felt that these issues had been handled successfully by the local government.

The growth of the 1970s was generally well received by community residents according to the interviews conducted for this study. While business activity increased and employment opportunities expanded, the community was perceived to have retained its traditional religious and social values. To a large extent this was attributed to the practice of local hiring and the reinforcement of kinship ties between many of the newcomers and long-term residents. Despite the population growth, most of those interviewed felt that the small town qualities of Salina had been retained. Mormon in-migrants were readily accepted into the community. Non-Mormon families were assimilated into the larger community through school-related activities and other social events. The church and the school were cited as particularly important institutions in the assimilation of newcomers and the coordination of community efforts to maintain a high level of community contact and cohesiveness.

Consequently, for those individuals who placed value on the retention of the small town characteristics of Salina (which appeared to be the majority), the energy development activities were seen to have been of an acceptable magnitude. To many, energy development and its associated population growth served to reinforce existing family, community and cultural linkages in Salina rather than to disrupt them.

### 3.3 Public Facilities

Prior to the study period, Salina, like many small, agriculturally based communities, had a low level of public facilities and services. Given the number of residents who were retired and on fixed incomes, the lack of industrial activities to contribute to the town's property valuation, and the trend of declining population, the resource base of the community was small, and public administration was conservative.

Consequently, the growth in population and housing that occurred during the study period, moderate though it was, placed demands and burdens on community facilities. A particular problem was water. Salina obtained its water from a well and a spring with limited capacities. As the population grew, neither the storage capacity nor the quantity of water was adequate and shortages developed, especially during the summer months. To meet the additional demands for domestic water, the town constructed a new storage tank and developed a pressurized irrigation system that was designed to conserve culinary water. Indicative of recurrent differences in perspective regarding such investments, the implementation of the system caused substantial community debate and strong resistance by some residents who felt that such investments were too expensive and unwarranted. Despite this opposition, the bond to finance the improved system was approved.

The need to issue bonds reflected the budget difficulties experienced by the municipality during the impact period. Because of the location of the mines, the town of Salina received no direct tax benefits from the increased energy activities in terms of increased property

values. The tax benefits to the community came from increases in sales tax revenues.<sup>1</sup> The funds are returned to local jurisdictions on a quarterly basis. Given the relatively small commercial sector in Salina, these revenues were limited. Consequently, the community showed little growth in its resource base as increased demands were made by the additional population and the changing, and heightened demand for services among the younger population.

During the study period, the state of Utah instituted a program of equalized valuation that resulted in a 20 percent devaluation of property assessment in Salina. This aggravated the community's budget difficulties by reducing revenues until adjustments could be made in mill levies.

Local response to these problems was twofold. First, the local property tax rate was raised ten mills. Second, to meet the additional demands, bonds were issued -- viewed by local residents as tax anticipatory loans. This marked a major shift in the fiscal policy of the community. Prior to the impact period, the community had generally maintained a policy of balancing expenditures to revenues. By 1977, the community had almost reached the limit of its bonded indebtedness.<sup>2</sup> The fact that the budget was operating on anticipated revenue was perceived to be a significant adverse change by a number of the elderly residents interviewed for the study.

### Schools

In Utah, school districts are frequently county-wide. State regulations regarding the financial support of school operating budgets specify that all districts receive comparable per student funds. Each

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<sup>1</sup>Utah state sales tax was 4.75 percent in 1981. The state general fund receives 4 percent while the city or county where the sale was made receives 0.75 percent.

<sup>2</sup>Debt - \$259,000; bonding capacity - \$281,817; town budget - \$227,581. DOE, Regional Profile Energy Impacted Communities, Region VIII, Denver, CO, March 1979:354.

district is required to collect property taxes for school operations at a standard mill rate -- 23.25 in 1980. The difference between the locally available property tax revenues and the statewide per student funding level (\$1,006 in 1981) is made up by the state. Consequently, changes in the local tax base did not affect the operating budget of the school district, only the proportion of revenues provided locally.

Capital development for school districts, however, was funded entirely by locally (in this case county) raised property taxes. The responsibility for raising these revenues lies with the district. Residents of Salina did not note any major problems with school facilities during the impact period, although several moderate problems were evident.

Interviews with school administrators indicated that the school system coped as well as possible with the growth. The population growth affected the elementary school more than the high school. Between 1975 and 1981, the number of students in the elementary grades increased from 340 to 591. Since the elementary system's capacity was only 500, additional classroom space was needed. The strategy followed was to obtain temporary facilities and expand the teaching staff. While the student to teacher ratio was above the recommended standard,<sup>1</sup> the general consensus was that the problems were being effectively handled. It was noted that the problems created at the elementary level (the system lacked space for counseling and rooms for special education programs) were exacerbated during 1980-81 by cutbacks in state funds.

The high school did not experience as much strain as the elementary school. Two factors help explain this. First, a new high school with a large capacity was built in the 1970s. Second, most of the miners were young, with elementary-aged school children. Key informants indicated

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<sup>1</sup>The student to teacher ratio at the time of the study was estimated to be 29 to 1 which is high compared to the recommended standard of 24 to 1.

that as mining operations continued, the entry of elementary school children of mining families to the high school would end the overcrowding at the elementary level and more fully utilize the capacity of the high school.

### Housing

Four major trends were evident in the housing sector during the growth period. First, the in-migration of workers and their families together with individuals who did not out-migrate placed demands on the housing sector. Because of the previous lack of transient populations, there were no large apartment/multifamily structures in Salina, and rental accommodations were virtually non-existent. The lack of available housing was aggravated by the characteristics of the housing stock -- predominantly detached small single family structures -- and the prevailing philosophy of not renting space within one's home.<sup>1</sup> Prompted by the influx of population, especially families returning to Salina, new trailers and mobile homes were brought in and placed throughout the area on vacant property adjacent to family homes. City administrators (as well as some city residents) viewed this as problematic because of the burden placed on community facilities and services as their use by multiple families increased. To prevent this unplanned growth, the city passed to resolution prohibiting random location of trailers and mobile homes.

This action resulted in the second trend in the housing sector: the establishment of mobile home parks. The mobile home parks were characterized by many old-time residents as highly conspicuous and symbolic of the mining-related growth. However, they were generally viewed as a better alternative than infiltration of the town's residential areas by mobile homes.

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<sup>1</sup>Although it was reported that a number of the returning out-migrants were temporarily moved in with their families.

The third response in the housing sector was the expansion of new subdivisions in three distinct areas of the city. For those individuals who favored growth or had members of their families move into the new subdivisions, the spatial expansion of the residential area of the town was a highly positive factor. However, some of the elderly residents who were interviewed were convinced that the public expenditures incurred from those developments had not been met by their property tax payments and that their construction had contributed to increased local taxes.

Although there were few opportunities for rental housing, the community coped with the unplanned growth by initiating planning and by expanding mobile home parks and subdivisions. The adjustments made in the housing sector were successful primarily because the mining-related growth was gradual rather than sudden, because the town's leaders took action to control and respond to the growth, and because (during the initial period) family members who had either in-migrated or decided to stay and work at the mine were accommodated in the homes of existing residents.

The fourth change in the housing sector was characterized by the development of public housing. During the 1970s, the city successfully applied for federal financial support to construct low income public housing projects. These projects were implemented, and many of the longtime residents who were interviewed indicated that the public housing project was not only a conspicuous community element but one that constituted a definite departure from the traditional community value of self-support and self-reliance. In fact, the public housing project was often presented as a reflection of the one negative aspect of mining-related growth perceived by community residents -- the in-migration of undesirable "outsiders" who did not meet the community's stringent social standards and who increased community reliance on government subsidies.

To illustrate their position, respondents tended to describe project occupants as primarily females with dependent children. This phenomenon was felt to have resulted from the in-migration of workers and their families from outside Utah in response to the availability of mining-related jobs. Because the number of job openings was limited and first preference was given to local residents, unemployment levels among the newcomers was initially high and many subsequently out-migrated. In some cases, the wives and children remained behind -- sometimes the product of broken marriages, and sometimes waiting for spouses to find employment elsewhere. Key informants suggested that such consequences were the unavoidable results of growth and the in-migration of "outsiders." The fact that mining-related growth was steady during the study period was seen to have minimized such adverse effects.

#### Crime and Law Enforcement

In addition to the influx of outsiders who did not conform to community standards, the major adverse impact of growth was perceived to have been an increase in crime. The increase in crime was particularly noticeable to community residents because of the comparatively low level of crime prior to 1975. Interviews with key informants suggested that the increase in crime was related more to the development of the interstate highway (and the resulting traffic through Salina) and the oil exploration teams (who are transients) than to coal development activities. The fact that Interstate 70 currently ends at Salina resulted in hitchhikers, drifters, and others who would stay in Salina. These persons were perceived as contributing to local larceny and gas theft. The oil and gas workers, who were transients, were treated with suspicion and mistrust and were periodically arrested for drug-associated crimes.

Officials estimated that in 1981 the city required a 20 percent increase in its crime prevention budget and additional full-time police officers. The general consensus was that the city had not effectively responded to the crime problem, although no reasons for this failure were provided.

### 3.4 Impacts on the Local Business Community

The mining-related growth resulted in an upturn in the city's economy, yet the business community expanded little, as shown in tables 3-8 and 3-9. Retailers reported becoming more viable, but large chain stores did not relocate to Salina. For major or bulk shopping, many Salina residents traveled to Richfield, the county seat, or to Provo to the north. This pattern persisted through the study period as a result of which residents reported that the expansion of mining operations did not substantially alter the pattern and characteristics of the business community. The building of a few hotels and restaurants during the study period was based on three concomitant developments: the construction of the interstate highway that terminated in Salina, the related growth of the tourist industry, and the growth of energy-related activities.

### 3.5 Summary

The study period (1970-1980) was characterized by a reversal of the historical population decline, the upgrading (though not transformation) of the business sector, the expansion of the housing sector, and strains on public services. Most of the problems, however, were largely resolved. The schools expanded and successfully managed the critical growth problems, but inadequate space in the elementary school remained an issue. New planning and zoning initiatives were undertaken, though no new governmental positions in planning were created. To meet the needs for an updated and expanded water system, the tax levy on real property increased.

Salina did not experience the major "social" problems or disruptions that typically are feared to occur in small communities experiencing rapid growth. Growth in population was not sudden but incremental and of low magnitude because mining employees were geographically dispersed. In addition, many of the workers who were recruited for the coal mines were residents of Salina or in-migrants who had previously

TABLE 3-8

Number of Basic Domestic Services  
Salina, Utah

Service	1970	1980	Change
Grocery	2	5	+3
Barber	0	0	0
Beauty Shop	1	3	+2
Restaurant	6	11	+5
Liquor Store and Bars	0 <sup>a</sup>	1	-
Shoe Store	0	0	0
Department Store	0	2	+2
Clothing Store	3	2	-1
Animal Hospital/ Veterinarian	0	0	0
Hardware	2	3	+1
Plumbing	0	1	+1
Banks and Savings & Loans	1	2	+1
Newspapers	1	1	0

Sources: Mountain Bell Southern Utah telephone directories for Salina, Utah, 1970, October 1980.

<sup>a</sup>Not included in 1970.

TABLE 3-9

Multi-national Company and Chain Store Presence  
Salina, Utah

Name of Company	1970	1980
A & W	X	
Foodtown (Barretts)	X	X
Case Tractors	X	
Chevron Service Station (Davies) (Jel in 80)	X	X
Intermountain Farmers Assn.	X	X
Texaco Service Station (Richards) (Genes in 80)		
Conoco Service Station	X	X
U-Haul	X	
Best Western Motel		X
Boise Cascade Homes		X
Stubbs Department Store (Christensens of Salina)		X
Goodyear Tire Center		X
Chevrolet/Oldsmobile Dealership		X
NAPA		X
7-11 Food Stores		X
Western Union Telegraph Office		X
Birrell Bottling Co (owned by Premoco)		X
Premium Gas and Oil Co.	X	X

out-migrated because of the lack of employment. As a result, the community did not experience an "old-timer/newcomer" split in social structure, although there were indications of increased tensions between the older and younger generations.<sup>1</sup>

The coal mining operations were often reported to have been a "social enhancing" activity: young people did not out-migrate; inter-marriage among residents continued, strengthening community social networks; and families were reunited through in-migration. The issues over unplanned housing growth, school overcrowding, and the expansion of public facilities and services were neither major nor serious. Even those which were not readily resolved did not become the basis for leadership change or intense conflict. The changes were not so large that the normal coping mechanisms of the community could not continue to function effectively.

A clear differentiation was made by local residents between the impacts of coal mining operations (which were generally viewed as positive) and other growth elements such as the opening of the interstate highway and oil and gas exploration, the social effects of which were generally perceived as negative because they brought newcomers with undesirable behavior into the community. The fact that coal miners were primarily Mormon with family ties to the area was a major factor in lessening potential social impacts. As a traditional, rural, Mormon town, the influx of large numbers of non-Mormons would have been perceived by local residents as problematic. In addition, although Salina was small and rural, coal mining was historically part of the community culture. Thus, the expanded mining operations were not alien to the local residents: they were an accepted and respected element of the community. The community was generally able to keep pace with the growth.

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<sup>1</sup>This was noted in other communities as well - in Douglas, Wyoming, for example, newcomer (non-project) residents felt the problems of integration were caused as much by generational differences as by the newcomer-longtime resident difference.



#### 4. CHANGES IN DIFFERENTIATION

#### 4. CHANGES IN DIFFERENTIATION

##### 4.1 Introduction

In this report, the concept of differentiation is used to measure the complexity and diversity of the community. An undifferentiated community would be one in which all or most community residents share similar qualities such as ethnic characteristics, religious backgrounds, cultural experience, and so on. It would also be a community with relatively little diversity or complexity in its occupational structure, its business community, and in the structure of local government.

One important thing that often happens in a community during a period of rapid growth is that it becomes more differentiated. That is, the local population becomes more ethnically, religiously, culturally, and economically diverse, different attitude and belief systems are introduced, lifestyle and expectations change, the age structure may become more differentiated, new organizations and offices are formed to respond specifically to the growth, and so on. Changes in the level of differentiation in a community are important in understanding the response the community makes to growth, understanding changes in the quality of life of local inhabitants, and in their perception of the community.

This section reviews changes that occurred in the political, economic, and social differentiation of Salina during the period of energy-related growth and discusses how they were related to the energy development. It also addresses the consequences of these changes for the community and its inhabitants.

##### 4.2 Political Differentiation

Political differentiation in a community necessarily involves an examination of the complexity of the political structure of the community and political organizations and the relationship between the

informal and formal mechanisms. In relatively undifferentiated communities, the formal (official) and informal mechanisms for identifying and solving problems tend to be merged. Although almost all communities develop some formal positions, including elected and appointed officials and public servants, the ability of such persons to function independent of intervention by individuals or informal groups in the community (that is, the degree to which problem identification and solving has become differentiated) varies considerably.

Differentiated communities have distinct advantages in responding to complex problems, since they have persons with appropriate expertise, they have specialized procedures, and the entire community has had experience dealing with internal conflicts and in identifying and accepting diversity and pluralistic solutions. An increase in political differentiation can be measured by the number and type of programs and new positions created to respond to issues over growth and by the degree of formalization of political activities and of the relationships between political units or jurisdictions.

The evidence suggests that political differentiation increased only slightly in Salina during the study period. Respondents noted no major change in the formality with which community affairs were conducted. The lack of any significant increase in formalization or centralization of local government's functions or expansion of governmental offices was attributed largely to the fact that the growth did not introduce significant numbers of persons with diverse political views. In addition, the magnitude of the increase and the pace of growth (as well as the anticipation of growth) was low enough that major clashes over real or perceived conflicts of interest did not arise. Salina was not forecast to become a major boomtown, and the degree of uncertainty was not perceived to be high. The existing political institutions were thus able to cope with the change and take those few but important actions necessary to mitigate growth problems without major political battles.

The local political structure of Salina -- the form of government -- remained unchanged over the impact period. The mayor-council system

(relatively unusual in Utah) was composed of longtime members of the community who were almost always church-goers and frequently church officials. The elected officials consisted of a wide spectrum of the community -- a part-time business manager, one businessman, two retired persons, a school teacher. Six other individuals were hired by the city to carry out city functions, including a police chief, a city clerk, a treasurer, a judge, and their support staff.

The functional organization of the city government remained intact; no new hirings occurred for major administrative positions nor was there evidence of increased professionalization which would have occurred with the hiring of a full-time planner or city administrator/manager. The problems were not considered to have been severe enough to warrant additional key professionals nor major restructuring of the administration. Because of Salina's location 25 miles from Richfield, the community was generally not actively involved in county government activities.

In response to particular problems, political actions were taken. As mentioned previously, to control unplanned location of trailers, the city established a zoning commission and ordinances to relocate individual trailers to mobile home courts. The zoning commission, however, was an ad hoc organization and did not work toward a master plan for the city.

While residents, generally, did not want to depend on outside agencies for financial support, the city applied for and received federal grants for its pressurized water system. However, this did not result in increased specialization or professionalization of administrative functions. During the impact period, some city departments grew, but the growth was not substantial. For example, although the fire department received new equipment, it continued to remain a volunteer organization.

#### 4.3 Economic Differentiation

Information on changes in the economic sector was provided in Chapters 2 and 3. To reiterate, the impact period was marked by increases in the labor force as mining operations expanded, and an increase in per capita income. The trucking industry grew rapidly because it was closely related to mining. While agricultural employment declined, employment in the mining and construction sectors expanded. Thus, certain sectors of the economy grew in importance.

While the mining and construction sectors expanded, the number of businesses increased only moderately during the impact period. The business community did not experience major structural changes; few large chain stores relocated to Salina. Rather, existing establishments became more viable, some modernized, and some new stores located in the community.

Examination of the banking structure showed that several changes occurred during the impact period. First, the two existing banks were modernized and banking procedures became more formalized. Second, there was a trend away from local control. The Salina Independent Bank was sold to Zion First National, centered in Salt Lake City. Thus, decisions became more formalized and control shifted outside of the local area. The close and informal relationships between bank administration and local residents that had been fostered for many years declined. However, the banks continued to recruit local residents at all employment levels. Thus, while formalization and loss of local control increased, the trend was for the banks to remain "local" in character. No specific consequences, aside from a sense of less local control, were identified as having resulted from these changes. However, it should be noted that no detailed analysis of loan policy was made to identify either changes in the availability of money or the distribution of loans among groups in the community.

#### 4.4 Social Differentiation

The impact period was characterized by a major change in the social and demographic profile of Salina. Historically, there had been persistent and substantial out-migration of young people from Salina. Employment opportunities related to mining resulted in the retention and in-migration of many young people. The greater mobility and high relative incomes resulted in new lifestyle elements in the city. However, these were tempered by the important social, cultural, and religious role the church played in the community. The church was a strong element for intergenerational unity in the community, moderating the tensions created by the differences in fiscal attitudes and lifestyle. In addition, intermarriage among local residents was heightened and informal social ties enhanced. There was little clear differentiation between old-timers and newcomers because most newcomers had family ties to the local area. Because of the homogeneity in religious practices, long-term familial ties, and the lack of significant "outsider" in-migration, the social ties remained fairly strong, with little differentiation. For these reasons, the energy-related growth may have contributed to less social differentiation than would have resulted from more generalized growth.

The outsiders who did enter the community did not have a significant impact on local social differentiation primarily because they were so few in number. While these individuals were often not of the dominant religious faith, those with families became integrated into the community through the participation of their children in local school programs and activities. The one possible exception to this pattern were the single parents (usually women) living in public housing.

## 5. CHANGES IN STRATIFICATION

## 5. CHANGES IN STRATIFICATION

### 5.1 Introduction

The stratification process in a community is important for two reasons. First, it reflects how rewards are allocated throughout the community. Second, it partially determines how decisions will be made. The stratification system often acts as a mirror, reflecting why and how community decisions are made.

Individuals and groups within a community can be distinguished by their access to various resources, such as income, education and employment. In Salina, key informants universally identified farmers/ranchers as a distinct group of considerable influence and status due to the contribution agriculture historically made to the existence and prosperity of the community. Other groups that were identified in Salina were church leaders, business owners (including self-employed professionals), teachers, miners, and other permanently employed workers, and transients. The characterization of the most commonly identified groups was as follows:

- 1) Farmers and ranchers. These were the descendents of the early settlers of the area. Many of the operations were small and marginal, with owners increasingly dependent upon wage and salary employment. Nevertheless, the farmers and ranchers were historically the community leaders. Many of the farms were in the process of being taken over by sons who were also employed in the mines.
- 2) Merchants. Salina's merchants were owners of moderate-sized retail and wholesale firms in the city. They were predominantly Mormon, resided mostly in the city, and most had a long-standing familial history in the area.
- 3) Miners. The miners were not heterogeneous as a social group, but were young, usually Mormon, and had familial links to the local area. They were not especially active in community affairs, yet as a group had high purchasing power.
- 4) Transients. In-migrants who were not employed in the mines or in trucking were identified by local residents as a separate social group. Often, these individuals resided in Salina on a temporary basis. The chief transient group was identified as non-Mormon individuals working in the area of oil and gas

exploration. Many of the social problems (crime) were attributed to them. Transients were consistently delegated to the lowest social strata in the community, if they were considered to be part of the community at all. This group had virtually disappeared at the time of the study because oil exploration had been completed.

The purpose of this chapter is to identify changes in the stratification system of the community during the impact period. For example, social groups may be differentially impacted by the growth. Some may gain status and power, others lose. Newcomers may, for example, assume leadership roles in the community and assume power from the traditional group. Minority groups may gain in income levels and expand their level of political participation. New criteria for obtaining status or power may emerge or be introduced.

### 3.2 Changes in Political Stratification/Leadership

Because few major changes, especially disruptive changes, resulted from energy-related growth in Salina, few changes in political organization were manifest. At both the beginning and end of the study period, elected officials were usually long-term residents of the community and represented the various socioeconomic levels of the local society. Community leaders were generally also important members of the Mormon church. As in other Mormon communities, the distinction between political and religious influence is not clearly delineated because of the high salience and activism of the church in community affairs and everyday life.

Decision-making in Salina was traditionally guided by a relatively small number of community members who often did not hold public office. Instead, these leaders influenced public opinion on community issues rather than acting as actual problem-solvers, in large part because there were few major crises to confront which were amenable to local control. Little change was observed in Salina over the study period in terms of the high congruence between informal and formal power, although in some rapid growth communities, an increasing number of persons who

lack informal power acquire formal decision-making positions of considerable importance.

Much political influence and expertise was exerted and provided by non-elected officials such as church bishops, bankers, and school administrators. As growth-related problems surfaced, there was a tendency for greater involvement and action by non-governmental officials and organizations. Thus, bankers played increasingly important roles in the local government's financing arrangements and grants applications. The church took wide responsibilities in dealing with social issues such as drugs and crime, and the schools organized special parent-school-pupil meetings to address these issues.

The political process was especially open to community members in Salina, and public meetings over important issues were characterized by high levels of community participation. The former mayor of Salina was a female, but females historically played a minor role in local politics. The key factor in electoral voting was managerial capability. The recent increase in energy-related growth did not appear to affect either the role of women in the political sector or to increase the role of newcomers or non-Mormons.

### 5.3 Changes in Economic Stratification

The major change in the economic stratification system in Salina was the differential in income between the generally younger mine workers or truck drivers and other agricultural and non-agricultural workers. Workers in mining, construction, and TCPU received significantly higher wages than employees in other sectors. This differential manifested itself in differences in purchasing power. The residents of the new subdivisions were predominantly families headed by young adults working in mine-related jobs. Some resentment was expressed by elderly residents based on the belief that although young coal miners had comparatively large incomes, they did not contribute positively to the community either monetarily or in government/community services.

There is no strong evidence, however, to indicate that employment at the mines resulted in any adverse, indirect effects to other sectors of the economy in terms of labor shortages or increases in wage rates. Although per worker wages in the agricultural sector did increase more in Sevier County than in Utah as a whole, local respondents did not attribute this to the increased mining activity, and indeed, felt it had been beneficial to those employed in agriculture.

Energy-related growth resulted in additional work opportunities for women in mining-related administrative positions or in other sectors where employment opportunities expanded. A large increase in female employment was felt to have occurred during the impact period, although data at the community level to demonstrate this change were not available.

#### 5.4 Changes in Social Stratification

No major changes appeared to have occurred in social stratification during the impact period. Social status remained based on occupation, length of residence, and church participation and status. Business groups, old-time families, and active church participants acquired social prestige in the community. As a small, rural community, social variation along socioeconomic lines was traditionally not great. Although young miners obtained high incomes, this generally did not upgrade their status as community members. Status and standing in the community had been and continued to be strongly related to community involvement. There had been little differentiation in informal organizations along socioeconomic levels and a generally high level of "social mixing" had historically taken place. This did not change appreciably during the impact period. The important role of the church and schools in the social/cultural life of the community tended to foster community networks among various socioeconomic groups in Salina.

#### 5.5 Changes in Access to Resources

Overall, the resource base of Salina did not undergo extreme change during the study period. The major areas in which changes in the cost

and availability or distribution of resources in Salina were noted were in housing and in taxation. Minor changes were observed in schools and in commerce.

Problems in acquiring housing and high housing costs were common for newcomers and new families; supply did not keep up with demand. The shortages resulted not only in higher prices, but utilization of mobile homes and doubling-up within families, though no quantification of this effect was available.

The need to provide municipal services without a substantial increase in the assessed valuation of the community resulted in increased property taxes. This increase was reported to have adversely affected the elderly more strongly than other group in the community since many of the elderly were on limited, fixed incomes.

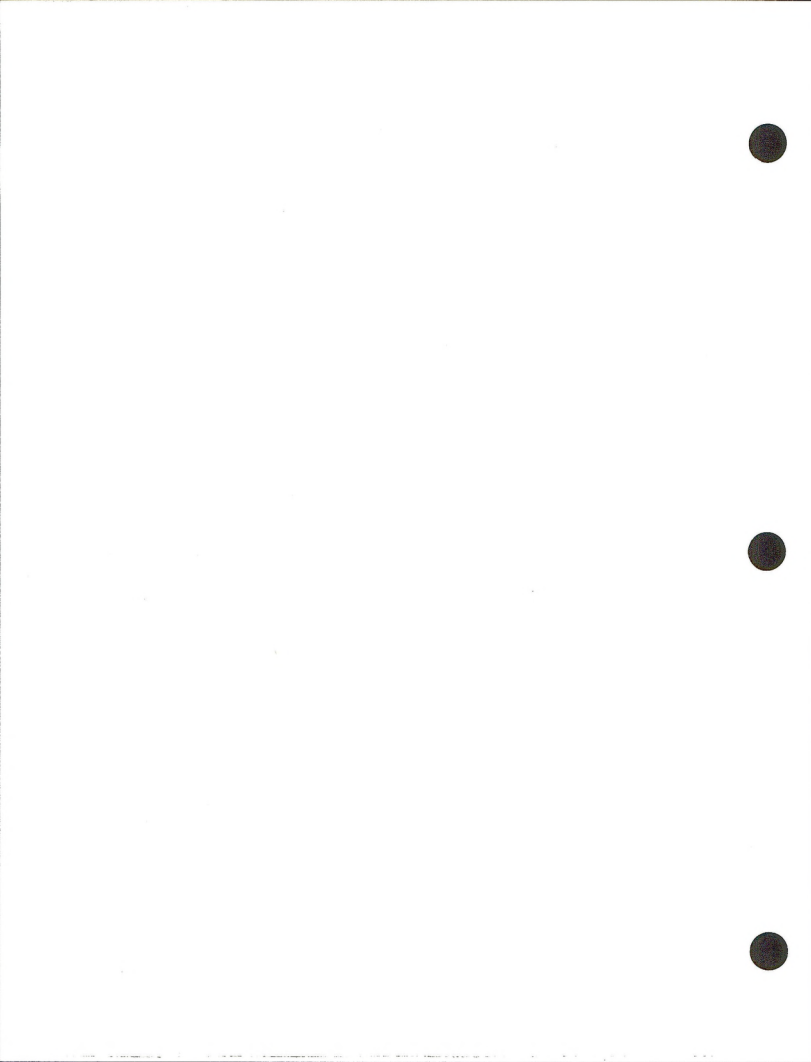
Elementary school facilities became overcrowded during the study period. The adverse effect of this overcrowding was felt by families throughout the community. Newcomer families were considered to have been among those most affected due to the high number of elementary children in newcomer families.

#### 5.6 Summary

The stratification system of Salina was not greatly affected by the energy development that occurred between 1970 and 1980. The criteria for status and power did not change significantly, although the importance of earned wages increased slightly. Because little new diversity was introduced into the community, the complexity of the stratification system increased only slightly.

The change in access to resources was mixed. Both residents and newcomers gained substantial occupational and income opportunities through the creation of new jobs; both newcomers and some longtime residents experienced difficulties obtaining satisfactory housing; all

property owners experienced increased tax levies, a change that had a particularly negative impact on the elderly.



6. CHANGES IN EXTRA-LOCAL LINKAGES

## 6. CHANGES IN EXTRA-LOCAL LINKAGES

### 6.1 Introduction

Communities emerge because people have needs which can be more effectively met by sharing activities than by performing them alone. Small, isolated communities like Salina perform the same basic functions as large metropolitan communities. Although small, isolated communities satisfy most essential needs, they usually do so without the variety or detail possible in larger, more differentiated communities. Instead, they tend to strive to satisfy the most basic needs and widely valued community goals, beyond which community members must often go elsewhere.

When populations are small, homogeneous and relatively permanent, as has been the case in Salina, the probability that immediate needs will be met by the community is relatively high, because both community and resident have had ample time to accommodate one another. This balance holds for as long as community needs and resources remain relatively stable. When these conditions change rapidly, this balance can be upset, and the ability of the community to respond is severely challenged.

The effective functioning of communities undergoing rapid change often depends upon their ability to obtain outside resources and assistance. There has often been little opportunity, interest, or need for communities like Salina to maintain contacts with knowledgeable persons or effective organizations in other locations, aside from the Mormon church. However, the more extra-local linkages available, the greater the information, organization, and material resources upon which a community can draw, and, equally important, the more likely such communities are to acknowledge the complexities of problems and their resolutions and to be willing to accept useful modifications.

The purpose of this section is to identify the degree to which Salina increased its linkages with persons and organizations outside the

community during its growth period, and to examine how outside ties affected the community. In some cases, linkages to persons and organizations outside the community can provide access to resources for the community (funds, expertise, information, political leverage), while in others they can serve as conduits for community resources to be removed and for outside influence to be applied.

## 6.2 Political Linkages

The field work in Salina indicated that the community's outside political linkages increased over the study period. Of particular importance in this process was Salina's growing reliance on planning and social services functions provided by the county, especially in the educational area. In addition, the securing of grants for public improvements during the impact period necessitated greater links and communications with multi-county (the AOG in Utah), state and federal agencies. Residents and leaders generally viewed these changes as a necessary consequence of the combination of population growth without concomitant increase in the tax base. They viewed the linkages as at least largely community initiated and as resulting in resource flows to the community. Nevertheless, some ambiguity is attached to these changes due to the importance placed by Salina residents on self reliance and independence of political activity. As numerous communities in Utah were faced with rapid growth during the mid-1970s, the state took an increasingly aggressive stand with regard to assistance programs and impact mitigation. (State funds to implement the program accrue from royalty payments on energy resources.) However, because Salina was not one of the heavily impacted communities and because it was not a county seat, a greater degree of local initiative was necessary to establish the political contacts required for effective participation/consideration in county and state programs. Leaders in Salina felt that the dense and overlapping social/political/religious networks in Utah facilitated this process.

### 6.3 Economic Linkages

In the economic area, the major change occurred in the shift from local to extra-local control of the coal mines. This shift, however, was generally considered beneficial by all key informants. According to those interviewed, former local owners did not have the resources necessary to expand the industry. While control of the mines was effectively outside the local jurisdiction with this transfer, those interviewed said that the managers of the mines had informed local officials of their plans and had actively participated in as well as sponsored community events. Senior company managers and engineers who relocated to Salina were well accepted by the community. This was considered particularly true of the Sufco mining operation. Because of the poor transportation links and long distances to the energy developments in Emery and Carbon County, community residents did not perceive themselves or the community to have been much affected by the large development activities in the region.<sup>1</sup>

Extra-local linkages also increased in the area of finance as banking establishments were increasingly controlled outside the local area. Although there was some speculation by community residents that this change had made it more difficult for locals to obtain financing, representatives of the banks disputed this view.

Unlike other rural growth areas impacted by energy developments, Salina was not the receptor of many chain establishments or department stores. Rather, smaller local establishments were upgraded and made more profitable. However, local residents expressed the desire that larger chain stores locate in Salina to increase the range of products available and to lower consumer prices.

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<sup>1</sup>However, they generally felt they had benefited economically by the fact that the problems of energy impacted communities was of political interest, with resultant efforts to provide state funds for community assistance and pressure on companies to avoid or mitigate adverse effects.

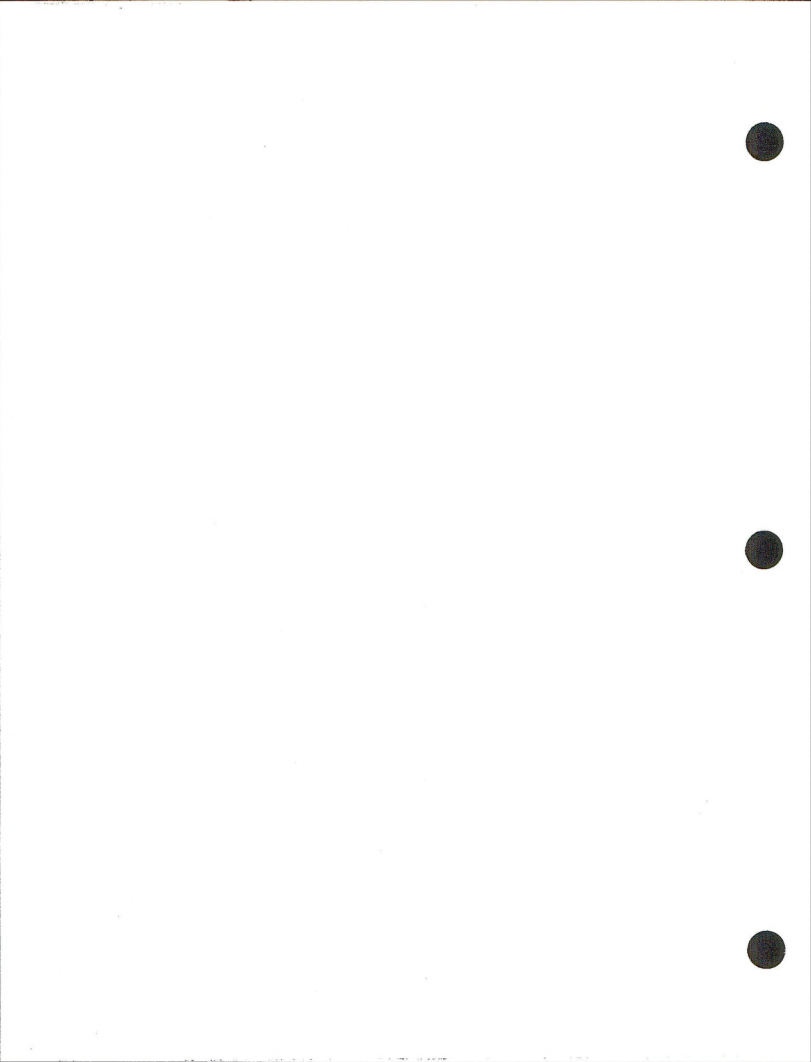
Although additional extra-local linkages in the economic sphere did occur and there were significant changes in the relative importance of the different economic sectors, it remained as true in 1981 as it was in 1970 that Salina's economy was not well diversified, and that it was dominated (as is any economy above the community subsistence level) by market forces well beyond the control of the local community. Respondents did not appear to consider the participation of large corporations or the effects of the national and international market as anything other than normal.

#### 6.4 Social Linkages

The data suggest that the increase in population during the impact period did not result in noticeable cultural or social heterogeneity. Thus, few new social organizations surfaced in Salina during the study period. Nevertheless, the return of a substantial number of persons who had been living outside the community did increase the social, personal and economic ties to the outside. Because of the strong ties that had apparently been maintained between the returnees and community residents, the relative dominance of these outside ties appeared to be less among newcomers in Salina than in other impacted communities. Because of these strong ties, it may be that the incentives and opportunities for the newcomers to utilize these contacts to enhance the community was higher than in other places, but no clear evidence indicated that this was so.

#### 6.5 Summary

Overall, although the change in extra-local linkages was not extreme in Salina during the study period, the changes that did occur constituted some of the most important consequences of the development, in part because of the very high value placed on self-sufficiency and independence by local residents. Because of the strong national trends toward increased economic and governmental linkages during the 1970s, it is difficult to determine precisely what proportion of the changes observed in Salina were attributable to energy development.



7. INTEGRATION

## 7. INTEGRATION

### 7.1 Integration

Communities vary in how different groups are included or accepted into the community and how well community activities and interests are coordinated. At a formal level, integration is a measure of the degree to which differentiated groups communicate and work together. The greater the communication and cooperation among different groups, the greater the integration.

Because of the internal dynamics of community integration, aggravated by a sense of proprietary rights to participation, newcomers, particularly transient newcomers, may not be allocated full community membership by old-timers. Such exclusion may be adaptive from the perspective of community residents because it protects their historical sense of community and reduces the need to adjust community structure and relationships. However, it also increases the likelihood that the problems experienced by the newcomers will not be acknowledged as a community problem, and will therefore remain unaddressed by the community. These difficulties may be particularly hard to avoid in communities where decision-makers fail to comprehend the nature of the exclusion because they are convinced that integration already exists. In communities like Salina that place a high reliance on informal social mechanisms, signals from unintegrated residents may be ignored, slowing down the changes that would allow greater integration of new community groups and a more direct attention to resolution of problems.

As used in this study, integration is taken to mean the process by which the various elements in the community are acknowledged, coordinated, and drawn into the activities and decisions of the community, and by which conflicts are handled and collaboration orchestrated. As with the three previous processes, integration is a complex process involving a variety of dimensions and characteristics.

Eight factors were found to be particularly important to the characteristics of community integration in Salina:

- 1) Existing goals and standards regarding the community were well established and understood, and were generally shared by residents and leaders.
- 2) The community and its leaders were not in open disagreement or conflict with the county seat nor the county residents (and hence the county government) and in fact shared a common culture and strong ties -- the Mormon religion.
- 3) At the time growth began, the community was highly organized, despite its relatively simple formal structure, with dense, overlapping networks of economic, political, social and religious relationships and a coherence manifested by the fact that the same group of individuals (representing a mixture of occupations) held the formal and informal leadership positions.
- 4) The community leaders were capable of, and prepared to take responsibility and leadership for, the community's response to growth, and community residents did not challenge them or disagree.
- 5) The community had little direct experience with unfamiliar or "different" population groups, although they had been exposed to them indirectly in Price and other energy impacted communities (though there were some indications that the importation and in-migration of various diverse ethnic groups was a "historical" phenomenon that would not occur again).
- 6) The dominant cultural factor in Salina -- Mormonism-- has a strong proselytizing element which can moderate the conservative, defensive posture of characteristic small, stable, rural communities. Combined with the general pro-growth orientation of Mormonism, this encouraged the community to view growth and the newcomers (especially the returning longtime residents) at least somewhat positively.
- 7) The majority of the in-migrants were not only Mormons, but were former residents as well.
- 8) The principal management issue facing Salina leaders was how to obtain sufficient monies to keep the town functioning rather than how to control and/or dispense large revenues or opportunities for windfall profits. This prevented serious issues of conflict of interest from arising.

From all appearances, Salina was an exceptionally well-integrated community during the pre-impact period. Consequently, the community was in a good position to respond effectively to growth -- the leadership of

the community was able to coordinate its efforts and shared a commonality of values and perspectives which made response largely cooperative, rather than a conflict-ridden process.

The difficulties the community did experience in responding to growth (the disagreement over raising the property tax rate) were the result of the only really adverse effect of the growth -- increased revenues were not adequate to meet increased demand. To a great extent this was due to the location (outside town limits) and nature (coal mines) of the development activities. Although coal mines often generate large royalties (and in other states severance taxes) their valuation is relatively low, and they consequently do not pay as great property taxes to the local governments as power plants do. Also, the taxes they do pay generally accrue to the county and school district rather than the town. Nevertheless, despite disagreement and grumbling, the residents of the community did take the action necessary to maintain adequate community facilities and services.

In part this response appears to have been facilitated by the fact that the community was not divided into longtime residents and outsiders (who could or could not be provided with adequate services) but was seen more as composed of longtime residents and returning former residents.<sup>1</sup> In part it was also facilitated by the fact that the community did not anticipate becoming a full-fledged boom town with the additional problems of uncertainty regarding peaks and declines associated with large scale construction activities.

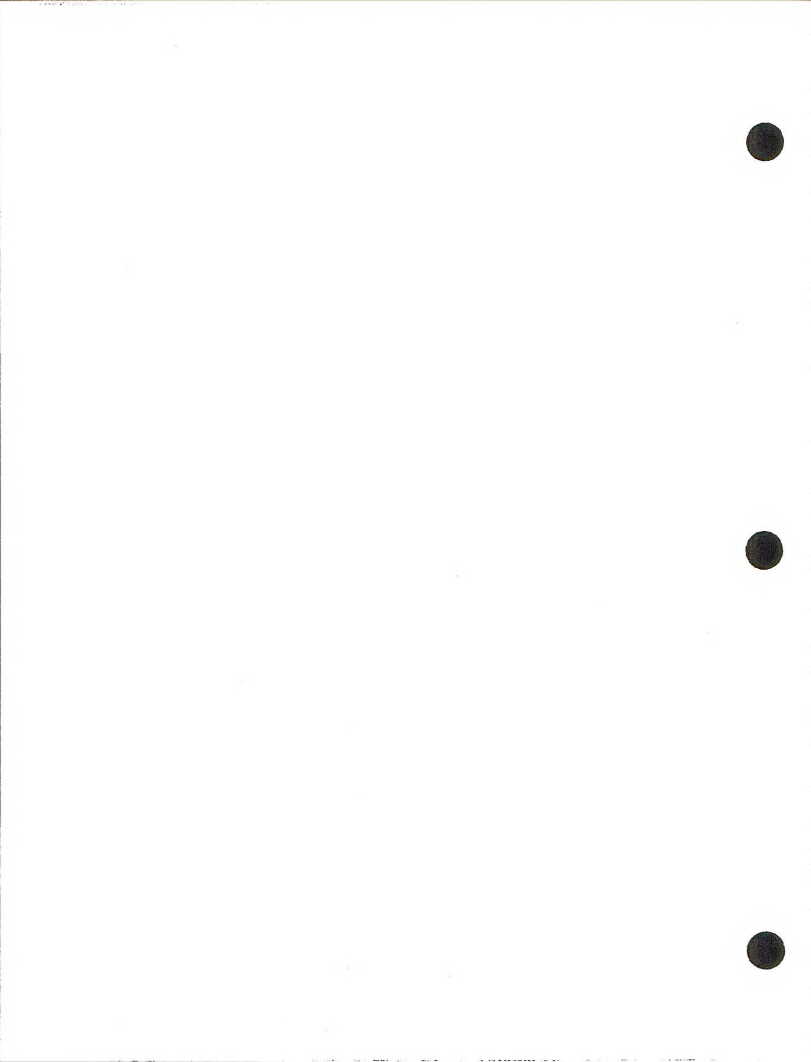
In conclusion, the moderate changes in personnel and practices in the political, economic and social spheres, combined with the high integration and coordination of the community prior to the growth, resulted in (1) effective response during the growth period, and (2) little change in the integrative characteristics of the community over the study period.

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<sup>1</sup>There appears to have been discomfort and exclusion of the other newcomers, however, especially the oil and gas workers.

## 7.2 Patterns of Personal Interaction

Although based on somewhat scanty information, community residents reported that little change had occurred in the patterns of personal interaction over the study period. Both official and day-to-day business continued to be conducted in an informal and personal manner, with a high proportion of the residents remaining familiar with other individuals and their families. The increase in extra-local linkages noted in the previous chapter did not appear to have significantly affected patterns of interpersonal relationship by the time of the study.



8. INDICATORS OF COMMUNITY  
WELL-BEING

## 8. INDICATORS OF COMMUNITY WELL-BEING

### 8.1 Introduction

This section discusses the indicators of social well-being of the residents of Sevier County and compares those indicators with other impacted counties in Utah, and where possible, the U.S. Three types of indicators of community well-being are discussed: (1) behavioral measures, (2) indicators of material well-being, and (3) attitudes expressed by local residents about their community, and the changes attributed to development. There are serious data availability and reliability problems with almost all of these data, so great caution should be exercised in their interpretation.

### 8.2 Behavioral Indicators of Well-being

The behavioral indicators discussed here include suicides, divorce, infant mortality, and crime.

#### 8.2.1 Suicide

Suicide has been identified as one potential behavioral measurement of a community's well-being. The data on suicides for Sevier and neighboring coal impacted counties is shown in Table 8-1. As seen in the table, the actual numbers of suicides in all three impacted counties (Sevier, Carbon, and Emery) are so low that comparisons between years, numbers and locations are unreliable. What is evident from this table is that in none of the three counties did suicides increase dramatically over the impact period.

#### 8.2.2 Divorce

The number and rate of divorce has also been used as an indicator of the social well-being of a community. Table 8-2 shows the incidence of divorce in Sevier, Carbon, and Emery counties, and in the state of Utah. Since 1970, divorce numbers and rates have fluctuated in Sevier County as opposed to the continual increase in both total number and

TABLE 8-1

Indicators of Community Well-being - Suicide  
(Number/rate per 100,000 population)

Year	County Carbon	County Emery	County Sevier	State Utah
1970	5/31.96	3/58.40	1/9.89	156/14.72
1971	3/18.63	0/0	0/0	129/11.78
1972	1/6.06	2/38.46	0/0	139/12.32
1973	4/23.11	0/0	0/0	146/12.69
1974	1/5.68	0/0	2/16.12	134/11.36
1975	6/32.97	2/29.85	5/39.06	165/13.71
1976	5/25.91	1/12.04	0/0	167/13.55
1977	2/9.8	1/10.75	0/0	180/14.17
1978	3/13.95	0/0	3/20.83	167/12.68
1979	6/27.78	1/9.25	3/20.00	179/13.09
1980	NA	NA	NA	190/12.9

Source: John Brockert, Director, Bureau of Health Services, personal communication, Salt Lake City, Utah, 7 May 1981.

NA = not available.

TABLE 8-2

Indicators of Community Well-being - Divorce  
(Number/rate per 1,000 population)

Year	County Carbon	County Emery	County Sevier	State Utah
1970	23/1.47	0/0.0	40/3.96	3,495/3.29
1971	38/2.36	3/0.56	35/3.33	4,171/3.80
1972	53/3.21	1/0.19	27/2.47	4,687/4.15
1973	55/3.18	4/0.66	33/2.79	5,137/4.46
1974	66/3.75	12/1.93	54/4.35	5,566/4.72
1975	70/3.85	17/2.53	55/4.29	5,892/4.89
1976	101/5.23	23/2.77	42/3.20	5,947/4.82
1977	105/5.15	34/3.65	47/3.43	6,941/5.46
1978	136/6.32	37/3.66	58/4.02	7,032/5.33
1979	109/5.05	32/2.96	51/3.40	7,509/5.49
1980	134/6.0	40/3.4	62/4.2	7,811/5.3

Source: John Brockert, Director, Bureau of Health Services, Salt Lake City, Utah, 7 May 1981, personal communication.

rate of divorce in Carbon and Emery counties and the state. The divorce rate in Sevier County in 1980 (4.2) was lower than the rate for 1974 (4.3). Carbon County's divorce rate in 1980 (6.0) was highest among the three counties and the state (5.3). Emery County consistently showed the lowest rate of these three neighboring and impacted counties.

#### 8.2.3 Infant Mortality

Infant mortality is defined as the death of an infant aged 0 days to 1 year, and the infant mortality rate is computed by the number of infant deaths per 1,000 live births. It can serve as an indicator of maternal health and medical care in the community. Table 8-3 shows the incidence and rate of infant mortality in Sevier County since 1970. The total number of infant deaths was small, making the infant mortality rates in Sevier, Carbon, Emery counties and the state unstable and unreliable measures of trends. Infant mortality rates in Sevier County fluctuated from a high of 19.4 (per 1,000 live births) in 1973 to a low of 3.8 in 1974.

#### 8.2.4 Crime

Crime has been an emotional and political issue in impacted communities, serving not only as a behavioral measurement or indicator of a community's social well-being in terms of creating or tolerating criminal behavior, but in terms of personal safety as well. Utah was one of the last states in the U.S. to conform to the Uniform Crime Reporting Act of 1972, thus it was not until 1978 that data on crime were routinely collected. As indicated by Table 8-4, crime rates in Sevier County increased during the study period from 27.81 per 1,000 population to 41.69 per 1,000 population.

These data confirm the opinion of residents that crime had increased, but interpretation of the data is limited by the short duration of the data collecting period.

TABLE 8-3

Indicators of Community Well-being - Infant Mortality  
(Number/rate per 1,000 live births)

Year	County Carbon	County Emery	County Sevier	State Utah
1970	3/11.15	1/10.52	1/4.97	405/15.01
1971	3/11.02	2/20.40	3/14.85	382/13.86
1972	4/13.84	3/32.60	2/9.05	360/13.37
1973	3/9.14	1/8.77	5/19.45	354/12.65
1974	7/19.1	2/14.92	1/3.89	364/12.2
1975	8/19.2	1/5.65	4/13.60	415/13.1
1976	9/19.8	3/11.67	4/11.23	414/11.7
1977	13/24.0	2/6.92	3/8.35	381/10.0
1978	7/12.43	3/9.03	5/11.79	443/11.4
1979	2/3.41	4/10.39	7/16.51	438/10.7
1980	9/14.6	5/11.87	5/11.79	435/10.4

Source: John Brockert, Director, Bureau of Health Services,  
personal communication, Salt Lake City, Utah, 7 May 1981.

TABLE 8-4

Indicators of Community Well-being - Crime  
(Rate per 1,000 population)

Year	County Carbon	County Emery	County Sevier	State Utah
1970	36.32	NA	NA	NA
1971	32.79	NA	NA	NA
1972	29.00	NA	NA	NA
1973	26.30	NA	NA	NA
1974	23.18	NA	NA	NA
1975	19.67	NA	NA	NA
1976	22.98	NA	NA	NA
1977	NA	NA	NA	NA
1978	41.00	17.57	27.81	52.83
1979	41.18	25.73	29.13	59.00
1980	41.93	38.77	41.69	58.83

Source: Utah Department of Public Safety, Bureau of Criminal Identification, Crime in Utah/1980, SLC, Utah:19, Crime in Utah/1979, SLC, Utah:19, Crime in Utah/1978, SLC, Utah:19.

Note: Utah was one of the last states to enact Uniform Crime Reporting and did so in 1978. Data on crime prior to 1978 is considered unreliable due to nonreporting by various agencies.

Note: NA = not available.

### 8.3 Material Indicators of Community Well-being

The indicators of a community's social well-being being addressed are per capita income, unemployment, public assistance and welfare, number of retail businesses, and student-teacher ratios.

#### 8.3.1 Per Capita Income

Per capita income is frequently used as one indicator of a community's social and economic well-being. Table 8-5 shows the per capita income annually since 1970 for Sevier, Carbon, and Emery counties, and for Utah. Per capita income in Sevier County has increased steadily since 1970, but has remained below the level of the state and Carbon County.

#### 8.3.2 Unemployment

Unemployment rates in Sevier County since 1974 have been unstable; fluctuating from a high unemployment rate of 6.6 percent in 1975 to a low of 3.7 percent in 1979. As shown in Table 8-6, since 1974 the unemployment rates in neighboring Emery and Sevier counties have been below the rates reported by Carbon County and since 1975 have been below the unemployment rates of the state as a whole.

#### 8.3.3 Public Assistance and Welfare

There are no data available by county on the expenditures accountable to public assistance and welfare in Utah. Public welfare and assistance expenditures and cases are reported by regions.

#### 8.3.4 Number of Retail Businesses

The number of retail businesses serves as an indicator of community material well-being, since the majority of residents of small towns indicate a desire for more, better, and more competitively priced retail goods. As seen in Table 8-7, the number of retail businesses in Sevier County increased only modestly over the 1970-1979 period -- from 85 to 103. This conforms to residents' perceptions that the community's

TABLE 8-5

## Indicators of Community Well-being - Per Capita Income

Year	County Carbon	County Emery	County Sevier	State Utah
1970	\$3,003	\$2,238	\$2,714	\$3,169
1971	\$3,172	2,117	2,944	3,427
1972	3,527	3,525	3,381	3,719
1973	3,987 <sup>a</sup>	3,980 <sup>a</sup>	3,856 <sup>a</sup>	4,082 <sup>a</sup>
1974	4,435 <sup>a</sup>	3,760 <sup>a</sup>	3,988 <sup>a</sup>	4,465 <sup>a</sup>
1975	5,214 <sup>a</sup>	4,202 <sup>a</sup>	4,344 <sup>a</sup>	4,903 <sup>a</sup>
1976	5,710 <sup>a</sup>	5,244 <sup>a</sup>	4,811 <sup>a</sup>	5,379 <sup>a</sup>
1977	6,212 <sup>a</sup>	5,636 <sup>a</sup>	5,294 <sup>a</sup>	5,919 <sup>a</sup>
1978	6,837 <sup>a</sup>	5,788 <sup>a</sup>	5,788 <sup>a</sup>	6,594 <sup>a</sup>
1979	8,400 <sup>b</sup>	6,500 <sup>b</sup>	6,300 <sup>b</sup>	6,900 <sup>b</sup>
1980	9,100(p) <sup>b</sup>	5,900(p) <sup>b</sup>	7,000(p) <sup>b</sup>	7,400(p) <sup>b</sup>

Sources: <sup>a</sup>U.S. Dept. of Commerce, Bureau of Economic Analysis, Per Capita Personal Income 1973-1978, Utah, April 1980.

<sup>b</sup>State of Utah, Department of Employment Security, Labor Market Information Section, SLC Utah, April, 1980.

Note: (p) = preliminary.

TABLE 8-6  
Indicators of Community Well-being  
Unemployment

Year	Carbon County Percent	Emery County Percent	Sevier County Percent	Utah Percent
1970	10.0		6.8	6.1
1971			6.0	6.6
1972			6.4	6.2
1973			6.1	5.8
1974	7.7	7.4	6.1	5.5/6.1
1975	7.9	5.8	6.6	7.2
1976	6.2	4.5	5.7	6.4/6.1
1977	5.6	4.3	5.7	5.7
1978	5.0	3.5	4.0	4.6
1979	4.8	3.6	3.7	4.5
1980	5.1	4.5	4.7	5.4

Note: Utah State Department of Employment Security, Labor Market Information, personal communication, Salt Lake City, Utah, May 1981.

TABLE 8-7

Indicators of Community Well-being  
Retail Business Total

Year	Carbon County	Emery County	Sevier County	State of Utah
1970	119	35	85	4,955
1971	107	36	85	4,980
1972	111	34	89	5,079
1973	108	38	94	5,284
1974	124	29	96	6,417
1975	NA	NA	NA	NA
1976	NA	NA	NA	NA
1977	138	52	113	7,137
1978	127	53	111	6,936
1979	129	45	103	6,856

Source: U.S. Department of Commerce, Bureau of the Census,  
County Business Patterns-Utah 1970-1974, 1977-1979. Washington,  
D.C.: Yearly.

Note: NA = not available.

business/retail sector was assisted by the growth, but that it was not radically changed.

#### 8.3.5 Student/teacher Ratio

The student/teacher ratio in Sevier County declined between 1971 and 1979 as shown in Table 8-8. The student/teacher ratios in Carbon County and the state also declined over this period. By 1979, Sevier County's student/teacher ratio was slightly higher than Carbon and Emery counties and the state, 22.16 compared to 21.80, 21.11, and 22.86 respectively, although the difference was slight. The highest student/teacher ratios for Sevier County occurred in 1971 and 1972 during the initial rapid growth period with 25.57 and 26.0 students per teacher in these two years, respectively.

#### 8.4 Attitudes Toward Development and Perceptions of Community Well-Being

As indicated throughout the report, most Salina residents expressed support for the increase in mining activity and said that they had supported additional development throughout the study period.

Most of those interviewed felt that the impacts on Salina had been slight, and that the positive effects had been enhanced and the adverse effects moderated by the mine owners' policy to expand the work force gradually and to make strong efforts to hire local residents or out-migrants from the area.

Aside from the problems of increased taxes, and the changes in fiscal policy which resulted in a substantial degree of community debt, the longtime residents of the community generally indicated that the characteristics of the community that they valued -- small town ambiance, strong adherence to Mormonism, high personal familiarity -- had not been greatly changed.

On the negative side, community residents reported that crime had increased, an adverse change they attributed primarily to the newcomer

TABLE 8-8

Indicators of Community Well-being  
Pupil/Teacher Ratio

Year	Carbon County	Emery County	Sevier County	State of Utah
1971	24.18	19.75	25.57	24.81
1972	23.48	23.52	26.06	24.62
1973	23.90	21.74	24.75	24.39
1974	22.75	20.31	23.12	23.99
1975	23.36	20.22	24.52	23.47
1976	23.35	21.13	24.63	23.07
1977	22.43	22.75	23.83	22.83
1978	22.69	18.93	23.76	22.33
1979	21.80	21.11	22.86	22.16

Source: State of Utah, Office of Education, personal communication, Salt Lake City, Utah, May 1981.

"transients" brought by the construction of the interstate highway and increased oil and gas exploration in the area.

Most residents expressed the view that overall, energy development, particularly coal mining activities, had had a positive effect on the well-being of community residents and on the community as a whole.

## 9. SUMMARY

## 9. SUMMARY

### 9.1 The Community Prior to Development

The community of Salina is located in south-central Utah in the northern portion of Sevier County, 125 miles south of Salt Lake City, and is surrounded by mountainous areas which are a part of the Fishlake National Forest. The city of Price is about 75 miles northeast of Salina and is the largest city in southeastern Utah with a population of about 9,000 people. The county seat of Sevier County, Richfield, is located approximately 25 miles southwest of Salina. In 1980, Richfield's population was estimated to be about 5,500 persons.

The communities of Price and Richfield are mentioned because they were historically important to the development and stability of Salina and served as places of employment and commerce for its citizens. Thus, the history of Salina and changes in its population were closely connected to developments occurring in these other two communities in the region.

Salina was settled in 1865 as a farming village to serve the surrounding agricultural area. The establishment of coal operations in the 1870s expanded the economic base of the community, but the operations were limited to the local market. A major expansion in Salina occurred during the 1890s when construction of the railroad caused a boom for the area's farming and ranching operations and helped to stabilize local coal operations. Agricultural reorganization in the 1950s and 1960s caused the amount of required agricultural labor to decrease, and the town experienced serious out-migration, especially among young people.

The population of Salina declined from 1,618 in 1960 to about 1,500 in 1970. This out-migration left Salina with a relatively old population, of whom approximately 80 to 90 percent were Mormons. The influence of the Mormon church in the area was pervasive and fostered close familial and social homogeneity. Although coal mining in the Salina

area resulted in some in-migration, most of the miners were either residents of Salina or persons who had out-migrated earlier and then returned. Consequently, the development of coal mining reinforced the existing family, community, and cultural organization rather than creating cultural diversity.

The occupational structure of Salina consisted of agricultural operators (farmers and some ranchers), the associated agricultural laborers, workers in retail and service trades in the community, and a small group of professionals. Because of a lack of significant extremes in wealth, there was considerable homogeneity in lifestyles. The dominance of the Mormon church in the community further added to the homogeneity of the area.

Salina, like many of the small farming communities in Utah, had a limited but adequate resource base. Agriculture and limited coal mining represented the major economic resources available to the community. Public services in Salina, again similar to other small Mormon communities in Utah, were meager but adequate and were built up over a long period of time. The tax levels required to support these services were low, and the level of services available was perceived as being good or at least adequate by the majority of the population prior to development.

Clearly, the dominant organizational force in the community was the Mormon Church. The presence of the Fishlake National Forest meant that there was always some organizational effect from the U.S. Forest Service, but the lack of changes in Fishlake National Forest and in Forest Service policy prior to the mid-1970s meant that this effect was minimal in the community. Other organizational groups in Salina consisted of the usual number of agriculture-related organizations and a few minor civic organizations.

Leadership in the community was drawn primarily from the members of the Mormon church. Because of the stability and strong family ties in the area, leadership tended to be reserved for older members of agricultural families who were active and prominent in the Mormon church.

Because of the high out-migration of youth during the 1950s and 1960s, the majority of local citizens highly favored development and particularly the development of coal resources. The development of coal resources posed no particular threat to local residents because coal mining had always been a part of the local cultural and occupational structure. Given the strong dominance of the Mormon citizenry, however, there was concern that there not be a large in-migration of outsiders who were culturally different, non-Mormon, and who might resent or resist any of the traditional Mormon ways of life. Thus, while economic development and growth were probably desired, this desire was accompanied by a strong concern that the presence and viability of the Mormon religion not be seriously altered by development.

## 9.2 Description of Energy Projects and Summary of Project Inputs

### 9.2.1 Project Description

Although a number of projects were located in the major coal fields of Sevier, Emery, and Carbon counties during the late 1960s and early 1970s, one mining project affected Salina the most. In 1965, Southern Utah Fuel Company (Sufco) purchased an existing (but small) underground mine and adjacent properties from a local family. Sufco became a subsidiary of the Coastal States Energy Company in 1973, and operations at the mine were subsequently expanded. The mine is a joint venture with Getty Resources.

None of the coal resources were in the immediate vicinity of Salina. The Sufco mine is located about 30 miles east of Salina in the Wasatch Plateau coal field. Distance, alternative residential settlements, and poor winter driving conditions minimized the effect of other energy development activities on Salina.

Employment at the Sufco mine rose from approximately 40 workers in 1970 to about 230 workers in 1980. Between 1970 and 1980, the population of Salina grew relatively steadily from 1,494 to 1,992 persons. Throughout this period, the population of Sevier County was also growing, rising from 10,103 persons in 1970 to 14,727 persons in 1980.

### 9.2.2 Direct Project Mitigation by Project Developers

Sufco followed a deliberate policy of moderate expansion and of hiring local residents or out-migrants from the area who wished to return. These two factors substantially reduced the potentially disruptive effects of the growth period.

## 9.3 Phases of Development

### 9.3.1 Early Phase: 1970-1975

Mining activity and expansion began in 1970, and by 1971 the population had increased by about 20 percent over early 1970 levels. But respondents reported noticing little change until 1973-1974.

There was never a period of really rapid change, and respondents indicated that there was no "boomtown" effect. The evidence suggests that the change was slow and gradual and that the community managed the changes in an acceptable manner.

### 9.3.2 The Impact Period: 1975-1979

This period was characterized by a reversal of the historic population decline and out-migration. The private business sector expanded, new housing was built and existing housing improved, and public services were expanded. Most of the problems were successfully resolved. The schools expanded and managed the critical growth problems, but inadequate space was a problem. New planning and zoning initiatives were undertaken, though no new governmental positions in planning were created. To meet the needs for an updated and expanded water system, the tax levy on real property was increased.

Salina did not experience major "social" problems or disruptions common to other communities experiencing rapid growth. Growth in population was not sudden, but incremental and geographically dispersed. In addition, the workers who were recruited for the coal mines were primarily residents of Salina or in-migrants who had previously out-migrated

because of lack of employment. As a result, the community did not experience "old-timer/newcomer" conflicts.

The coal mining operations enhanced the social structure of Salina: young people did not out-migrate; intermarriage among residents continued strengthening community social networks; and families were reunited through in-migration. The issues of unplanned housing growth, school overcrowding, and the expansion of public facilities and services were not major issues nor serious ones; they were easily managed and controlled. The changes were small enough for the normal community mechanisms to function effectively.

A clear separation was made by local residents between the impacts from coal mining (generally viewed as positive) and other growth factors -- the arrival of a new interstate highway and oil exploration (generally perceived as negative). The fact that the coal miners were primarily Mormon with family ties to the area was a major factor in lessening social impacts. In addition, although Salina was small and rural, coal mining was historically part of the community culture, and mining operations were not alien to local residents; it was an accepted and respected element in the community. Salina was generally able to keep pace with the growth during this phase.

#### 9.3.3 The Leveling Phase: 1979-1981

Some minor growth was still occurring during this period. Because expansion of the private and public sectors of the economy was not sudden or dramatic, Salina did not experience any significant post-boom decline. Because there was no large in-migration of construction population, there was no appreciable exodus or decline. The population of Salina is expected to continue growing slightly or to stabilize unless the demand for coal changes significantly.

## 9.4 Changes in Community Resources

### 9.4.1 Migration Activities

Aside from the policy of slow growth and the hiring of locals, the company was not reported to have undertaken any major mitigative actions, although its management was considered active in support of the community.

### 9.4.2 Private Investments

The mining expansions were not large enough to have major effects on the service sector. Although marginal firms became viable and a few restaurants and hotels relocated to Salina, there was no major expansion of the economy in terms of new businesses. Consequently, competition with established businesses was very limited. This fact reinforced the positive attitudes of the business community toward gradual growth resulting from mining operations in the region.

### 9.4.3 Expansion of Public Facilities

The population growth created demand for more water. The city constructed a storage tank and pressurized irrigation systems to save culinary water. The irrigation system was an area of community contention, but it was approved following a bond election.

The need to hold a bond election or to borrow money (in anticipation of tax revenue) reflected the town's budget problems during the impact period. This was partly a function of the growth and was aggravated by a 20 percent property devaluation which temporarily lowered the community's tax base. The combination of growth-induced expenditures and the devalued tax base resulted in financial difficulties for the local government.

Local response was two dimensional. First, the local property tax rate was raised ten mills. Second, because the additional growth-induced expenditures could not be met, bonds were issued. This marked a major shift in fiscal policy; prior to the impact period, there had been

sufficient revenue to meet budget requirements. The fact that the budget was operating on anticipated revenue was perceived as a major drawback by a number of elderly residents who were interviewed.

#### 9.4.4 Housing

Since there were no large apartment/multi-family structures in Salina, rental housing accommodations were virtually non-existent. This factor was reinforced by the prevailing philosophy of not renting space within one's home. As a result of in-migration, new trailers and mobile homes were scattered throughout the area on vacant property adjacent to family homes. This trend was problematic for the city because single-facility services were used for multiple families, and the water and sewer systems became overburdened. To alleviate this unplanned growth, the city passed a resolution zoning the location of trailers and mobile homes.

To satisfy housing needs, several new mobile home parks were built. To old-time residents of Salina, the mobile home parks were conspicuous, but they were not perceived negatively. New subdivisions were also built in three distinct areas. For those individuals who favored growth or had members of their families move into the new subdivisions, the spatial expansion of the housing sector was a highly positive factor. However, some elderly residents felt that these developments resulted in increased local taxes which were seen as an additional burden on home owners on fixed incomes.

Public housing was also developed in Salina. The town received federal financial support to construct low-income public housing projects. To some residents, such housing was a definite departure from the traditional community value of self-support and self-reliance.

#### 9.4.5 Schools

School administrators stated that the school system coped well with the growth. Mine employees were relatively young, with more elementary school-aged children, so the growth was the greatest in the elementary

system. Between 1975 and 1981, elementary school enrollments increased from 340 to 591 students. The system, with a capacity estimated at 500, obtained temporary facilities and expanded the teaching staff. While the student/teacher ratio of 29:1 was high compared to the recommended standard of 24:1, the problems appeared to have been adequately handled. A new high school was constructed in the mid 1970s, substantially expanding the system's capacity at the high school level, where the student/teacher ratio was maintained at about 21:1 throughout the study period.

The fact that many of the miners were Mormons who had returned to Salina or were local residents meant that cultural barriers in the school were not a serious problem. The level of community involvement in school activities was consistently high. This participation was an important coping and planning mechanism.

#### 9.5 Changes in Social Organization

Because the population growth in Salina was relatively small, gradual, and spread evenly over the decade, the changes in social organization were not significant.

##### 9.5.1 Diversity/Complexity

In Salina there was no apparent increase in formalization or centralization of local government functions or expansion of government offices. Existing political institutions were able to cope with the change and take those few, but important, actions necessary to mitigate growth problems.

In terms of economic diversification, the mining and construction sectors expanded, but the number of businesses increased only slightly during the impact period. The business community did not experience major structural changes. Rather, existing establishments became more viable, and some were able to modernize.

The two existing banks modernized somewhat, and banking procedures became more formalized. When a local bank was sold to Zion First National, centered in Salt Lake City, decisions became not only more formalized, but control also shifted outside of the local area.

Greater mobility and higher incomes resulted in some lifestyle changes. These were tempered by the social, cultural, and religious role of the church which was a strong intergenerational unifying element in the community. In addition, intermarriage among local residents heightened informal social ties. Because of homogeneity in religious practices, long-term familial ties, and the lack of significant "outsider" immigration, social activities changed very little.

#### 9.5.2 Outside Linkages

Salina increased its reliance on planning and social services functions provided by the county, especially in the educational area. The securing of grants during the impact period necessitated greater communication with state and federal agencies. Yet, this increase in political linkages was not significant because Salina residents placed great importance on self reliance and independence of political activity.

In the economic area, the major change was a shift from local control of the coal mines to extra-local control. This shift, however, was viewed as positive by all respondents. The former local owners did not have the necessary resources to expand the industry, and while the mines were controlled by outsiders, the managers of the mines informed local officials of their plans and actively participated in community events. Senior company managers and engineers who relocated to Salina were accepted well by the community. Extra-local linkages also increased in the area of finance with increased banking control outside the local area.

#### 9.5.3 Distribution of Resources and Power

Important social groups identified in Salina were the following:

- 1) Merchants. A large majority of the owners and managers of retail and wholesale firms in the city were Mormon, resided in the city, and had long-standing familial history in the area.
- 2) Agriculturalists. Many of these descendants of early settlers of the area ran small farm/ranch operations on a marginal basis. Many owners were becoming increasingly dependent upon wage and salary employment. Members of this group were traditionally among the community's leaders.
- 3) Miners. The miners were not heterogeneous as a social group, but were mostly young, usually Mormon, and had familial links to the local area. They were not very active in community affairs, yet as a group they have enormous purchasing power.
- 4) Transients. In-migrants who were not employed in the mines were identified by local residents as a separate social group. Often, these individuals resided in Salina on a temporary basis. The chief transient group was oil exploration crews, and many of the social problems (crime) were attributed to them.

Elected officials were usually long-term residents of the community and represented various socioeconomic levels of the local society. There were no apparent changes in political stratification during the impact period. Much political influence and expertise was exerted by non-elected officials such as church bishops, bankers and school administrators. As growth-related problems surfaced, there was a tendency for greater involvement and actions by non-governmental officials and organizations. Bankers played increasingly important roles in the local government's financing arrangements and grant applications. The church assumed responsibility for social issues such as drug abuse and crime, and organized special parent-school-pupil meetings to address these issues.

The political process was especially open in Salina, and public meetings over important issues were characterized by high levels of participation. The former mayor of Salina was a female, and females had historically played a strong role in local politics. Energy-related growth did not affect either the role of women in politics or increase the role of newcomers or non-Mormons.

The major change in the economic stratification system in Salina was the differential in income between the generally younger mine workers or

truck drivers and other non-agricultural workers. There was some resentment expressed by elderly residents that the young coal miners with comparatively large incomes did not contribute positively to the community either monetarily or in government/community service.

Energy-related growth did result in additional work opportunities for women in mining-related administrative positions or in other sectors where employment opportunities expanded. An increase in female employment was evident during the impact period.

Social variation along socioeconomic lines was not large. Although young miners received high incomes, they generally did not upgrade their status as community members. Status and standing in the community was strongly related to community and church involvement.

## 9.6 Changes in Social Well-being

### 9.6.1 Access to Resources

Improvements in public services (water, schools, law enforcement) benefited everyone, including the elderly. Income increased for the working-age population, and private goods and services were expanded and improved. Although the tax burden increased for the elderly, the presence and dominance of the Mormon church ensured that none of the elderly were left destitute.

### 9.6.2 Behavior Changes

Most residents felt that crime had increased but believed any increases were caused by the oil exploration crews and the presence of the new interstate highway. Increases in crime were not large in any category, and crime was not perceived as a serious problem by anyone interviewed.

Significant increases in mental health problems were generally not noted, although residents suspected that the tenants in the low-income housing units would require mental health services. There was also no evidence of any increased family disruption.

Alcohol abuse was noted as a long-standing community problem. However, the incidence of alcohol abuse was not considered to have been greatly affected by the mining activities. Increases were attributed to oil workers and transients brought in to work on the new highway.

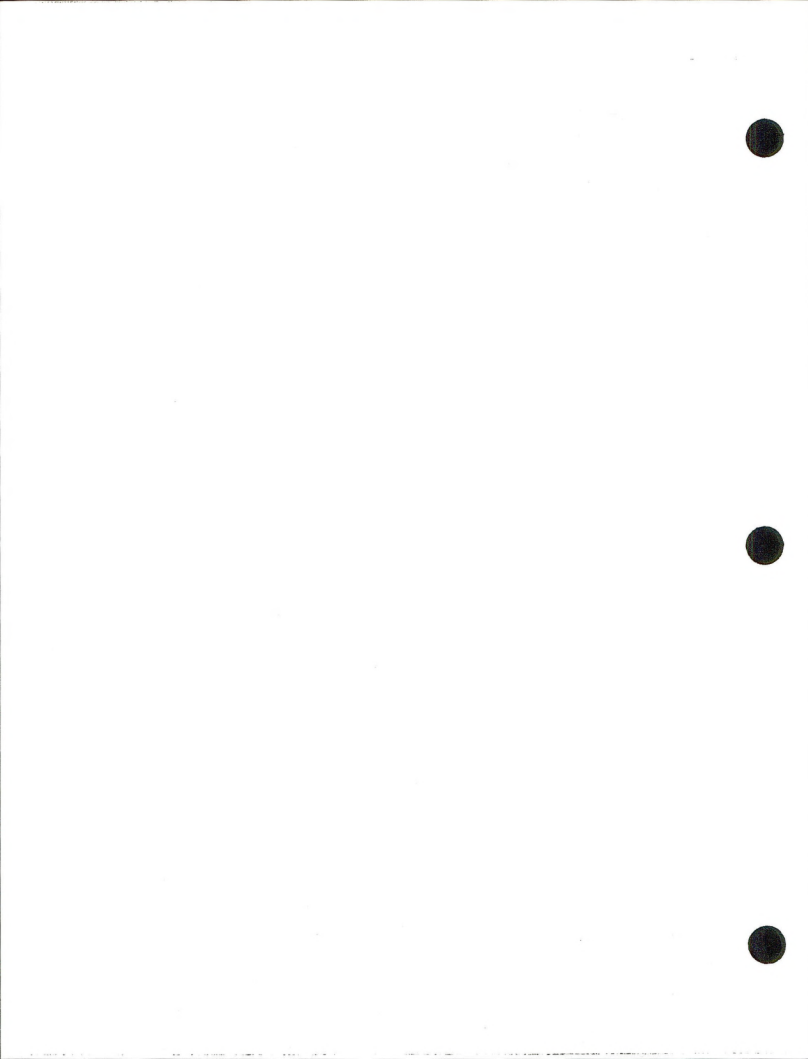
Concern was expressed regarding child care practices among the residents of the low-income housing unit, but no data were available to document any changes. In general, the strong Mormon emphasis on family life was thought to have minimized child neglect and abuse problems among the general population.

#### 9.7 Summary of Major Findings: Salina, Sevier County, Utah

One: The mine owners apparently made conscious decisions to expand gradually and to place strong emphasis on hiring miners living locally. These two factors greatly reduced any growth problems.

Two: Like most municipalities in the West, the city had inadequate financial resources. If the changes had been larger, financing new services would have been a major problem.

Three: There were apparently no major social problems associated with the growth in Salina and Sevier County. However, average annual growth was less than 3 percent per year in Salina and less than 4.5 percent annually in Sevier County over the decade. Further, the growth was spread rather evenly over a ten-year period.



APPENDIX A:  
EXAMPLE INTERVIEW GUIDE

APPENDIX A  
Example Interview Guide

A.1 Agency Interviews

- A.1.1 Interviews with Service Agencies  
(school, social services-welfare, law enforcement, public health,  
mental health, judge if possible)

A.1.1.1 Schools

- 1) Introduce yourself and explain purpose -- want to know how community addressed each of the needs that occurred during period of rapid growth (or last five years).
- 2) Review population data and causes of growth.
- 3) Review school data (have copy ready for them)  
Make any corrections/additions or comments. If data not available locally, find out where it would be.
- 4) How has demand changed? Why? (esp. energy growth)
- 5) Has classroom space been adequate and available when needed to meet demand? If not, when was problem period? Why was there the problem? How was it resolved?
- 6) What important changes have occurred in the areas of....? Was that a problem? How were problems addressed? What are concerns for future?
  - curriculum/education approach
  - staff
  - student behavior and characteristics - probe esp. for transiency (check availability of turnover rates)
  - administrative procedures
    - any special programs for newcomers
    - any special problems created by newcomers
    - any changes due to growth
  - financing
- 7) What school-related changes or issues have there been that drew public interest or participation? (e.g., consolidation, new school construction, etc.) Point is to articulate public decision-making process. What are concerns?
  - Who, when, what, how, why. Who were the parties involved,
  - Who was not involved who logically should have been?
  - If there were factions, identify issue and probe for recurrence and for names of prime actors on both sides.
  - Was there a point when problems started being addressed in a new way? When? Why?
- 8) At the beginning of the growth period (or 10 years ago), who were the influentials in the community?
  - How has that changed? What was energy development's role? Who were key decision-makers for community during growth period?
- 9) Check for changes in extra-local linkages (source of funds, contacts, source of teachers in-service, etc.)

- 10) In their opinion, were there groups in the community that have been (or would be) affected differently by the growth and energy development?
  - Both positive and negative
  - Who, how and why (seek mechanism and understanding of change and community structure that distributes effects/opportunities) (prompt for employment, housing, services, schools, way-of-life)
- 11) Functional groups and social differentiation:
  - try to get a description of criteria for social differentiation (in pre-growth period if there was one) and of each of the major groups (size, livelihood, geographic location, ethnicity, property ownerships, relationships between groups) How has that changed? (Criteria, groups or group characteristics). The purpose is twofold: (1) to describe structural/organization characteristics of community and (2) to identify attributes of groups that could influence distribution of project effects. Get names of group representatives. (Important for interviewing but also to illustrate familiarity with different strata.)
- 12) Demographic characteristics of respondent
  - position and history of employment
  - length of residence in community
  - where from
  - family characteristics
  - age
  - sex
  - relationship to energy development

A.1.1.2 Law Enforcement

- 1) Introduction
- 2) Review growth data
- 3) Review Part 1 and Part 2 crime and service provision
  - reported crime
  - calls for service
  - budget
  - uniformed officers and personnel
  - cars
- 4) Did crime and/or calls for service increase during growth period? What are expectations?
  - what types of crime(s)
  - who were (will be) perpetrators?
  - who were (will be) victims? Did (will) crime occur in particular neighborhoods/areas?
  - what do they think was (or will be) reason for change?
  - (Sheriff, what about specific county problems -- trespass, poaching, cattle rustling, etc. what is county people's view?)

- 5) Service provision
  - Were (will) personnel and equipment (be) adequate?
    - If not, when was it inadequate?
    - Why was it inadequate?
  - What important changes have occurred (or are anticipated) in their department?
    - staff
    - administrative procedures
    - manner of enforcement
    - source of financing
- 6) What law enforcement changes (or issues) have there been that drew public interest or participation? (e.g., new jail, consolidation of enforcement) Object is to articulate public decision-making, and to discuss sequence of response by community and leaders re: energy-related demands)
- 7) At beginning of growth period, who were the influentials? How (and when) did that change? What was role of energy development?
- 8) Check for changes in extra-local linkage.
- 9) Ask about groups and distribution of growth effects to different groups. Check especially for relationships among groups. Ask if they know representatives from each group that could be interviewed.
- 10) If appropriate, ask personal interview questions:
  - At least get demographic characteristics
  - position and history of employment
  - length of residence in community
  - where from
  - family characteristics
  - age
  - sex
  - relationships to energy development

#### A.1.1.3 Social Service/Public Assistance and Mental Health

- 1) Introduction
- 2) Review growth pattern and causes
- 3) Review agency data structure of agency
  - by type of assistance: total annual expenditures
  - expenditures per 1,000 population
  - case loads
  - staff levels
- 4) How has demand for service changed?
  - Why? Change in use patterns by long-time residents? Why?
  - Different use patterns by newcomers? Why? How are these reflected in the data?
- 5) Have staff and resources been adequate and available when needed to meet demand? If not, when was problem period? Why was there the problem? How was it resolved? Have they received adequate support from state?
- 6) What important changes have occurred (or are anticipated) in the areas of... What is their view on source of change? Any data?

- child abuse and neglect
  - marital discord, spouse abuse, divorce
  - alcoholism
- 7) What public service/assistance-related changes or issues have there been that drew public interest or participation? Describe issue, when it occurred, who played what roles, what was outcome, how does that fit into overall decision-making pattern in community? Was there a point (in growth period) when decisions started being made in a new way or by different people?
  - 8) Who were influentials at beginning of growth period? How has that changed? What was energy development's role? Get names of really key individuals re: community actions.
  - 9) What distinguishable groups are there in the community? What are criteria for social differentiation? What are distinctive attributes of each group? How would one characterize relationships between groups? What about prior to growth? (Any particular neighborhoods?) Names of people who could discuss each group.
  - 10) Have groups been affected differently by growth? Especially energy development? What about inflation? How have effects of energy development been distributed among groups? How has that occurred?
  - 11) Demographic characteristics of respondent
    - position and history of employment
    - length of residence in community
    - where from
    - family characteristics
    - age
    - sex
    - relationship to energy development

## A.1.2 Group Representatives/General Population

### A.1.2.1 Introduction

#### A.1.2.2 Personal biography

- 1) Background (family, where lived)
- 2) When came to community
- 3) Educational history
- 4) Occupational history, esp. during 1970s
  - occupational mobility/immobility
  - energy-related employment
    - how did (would) they get it? entrepreneurial - ask about financing, business style and expansions
- 5) Housing - price or availability
- 6) Family history
  - family and employment history of spouse
  - school experience of children
- 7) Service provision - any problems? evaluation -- compare predevelopment with now.
- 8) What recreational/social activities available and used; compare predevelopment (or future) with now.
- 9) Who are their friends, occupation - length of residence, location - how did they become friends? Change during study period?
- 9a) Who are their children's friends?
- 10) How were friends affected by development?
- 11) How about others in the community?
  - What other groups do they see?
  - Were any affected differently? How?
- 12) Have newcomers been accepted as part of the community?
  - Examples of interaction between longtime residents and newcomers; between various groups.
- 13) How do they feel they personally have been affected (or anticipate)?
- 14) How do they feel their neighborhood has been affected (or anticipate)?
- 15) If parents are in community, how have they been affected (or anticipate)?
- 16) What changes have occurred in the community (or anticipate)?
  - What effects have there been from energy development (or anticipate)?
  - Probe child abuse
    - change in decision-making
    - change in orientation/focus
    - sense of vitality
    - sense of community purpose
- 17) General satisfaction with expected changes
- 18) If good spokesperson for their group
  - Profile of group predevelopment
    - livelihood
    - size